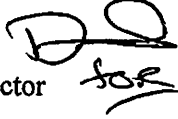



MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver   
Executive Director 

DATE: March 16, 2012

SUBJECT: Cooperative Reports

ESTIMATED TIME 2 HOUS
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**ACTION REQUIRED**

- (a) Receive Amendment 80 Cooperative Reports
- (b) Receive CGOA Rockfish Cooperative Reports
- (c) Receive AFA Pollock Cooperative and IPA Reports

**BACKGROUND**

Three Cooperative programs subject to Council management require that cooperatives submit an annual year-end cooperative report summarizing their fishing activities from the preceding year to the Council. Due to the volume of these materials, a few copies of the complete reports from the various cooperatives will be made available at the meeting, and full copies are available from our offices.

a) Amendment 80 Co-op reports

Implemented in 2008, the Amendment 80 program is a limited access privilege program (LAPP) that allocates a portion of total allowance catches (TACs) for Atka mackerel, Pacific ocean perch, and 3 flatfish species (yellow sole, rock sole, and flathead sole), along with an allocation of prohibited species catch (PSC) quota for halibut and crab, in the Bering Sea/Aleutian Islands, to the Amendment 80 sector. A single cooperative formed in 2010. A report from that cooperative will be provided at the meeting.

b) CGOA Rockfish Co-op reports

Cooperatives participating in the Central GOA of Alaska rockfish pilot program also provide annual reports of their fishing activities in that program. Several cooperatives formed in the offshore sector and inshore sector. The I.S.A. Rockfish Cooperative, North Pacific Rockfish Cooperative, OBSI Rockfish Cooperative, Star of Kodiak Rockfish Cooperative, Trident Offshore Rockfish Cooperative, Western Alaska Fisheries Rockfish Cooperative, FCA Cooperative, and Best Use co-op were mailed to the Council in advance of the meeting. The USS Rockfish Cooperative and the Cascade Unimak Rockfish Cooperative are attached as Item C-1(a) and C-1(b). Cooperatives will provide a summary report to the Council at this meeting.

c) AFA Co-op reports and IPA reports

Each year, the AFA Bering Sea Pollock fishery cooperatives submit year-end reports summarizing their fishing activities from the preceding year and cooperative agreements for the upcoming year (these were mailed to you on March 5). This requirement is interpreted such that the cooperatives

submit information only if and to what degree such agreements have been notified from existing agreements. Co-op representatives will provide a joint, summary report to the Council at this meeting. Under Amendment 91 to the BSAI Groundfish FMP, sector representatives are also now required to provide an overview of their Chinook salmon bycatch reduction efforts under individual incentive program agreements (IPAs). Representatives will provide their first IPA reports from the 2011 fishing year at this meeting. Written copies of these reports are not due until April 1.

**USS ROCKFISH COOPERATIVE**

2011 Annual Report to the  
North Pacific Fisheries Management Council

Submitted on 3/8/12 by Matthew Upton  
mupton@usseafoods.net  
(206) 763-3133

USS Rockfish Cooperative 2011 Annual Report to NPFMC

**I. Introduction and Cooperative Quota**

In 2011, the USS Rockfish Cooperative (“USS Co-op”) was comprised of the vessels ALLIANCE and LEGACY, license limitation program (“LLP”) numbers LLG2905 and LLG1802 respectively. David Wood is the authorized representative of the USS Co-op. ALLIANCE and LEGACY assigned the rockfish pilot program (“RPP”) quota share (“QS”) attached to their LLPs to the USS Co-op creating its initial annual fishing cooperative quota (“CQ”) as accounted for in Table 1.

Table 1: Initial USS Co-op CQ (metric tons).

	Initial CQ Allocation (mt)
GOA Pelagic Shelf Rockfish	52.68
GOA Rougheyeye Rockfish	10.31
GOA Shortraker Rockfish	1.97
GOA Thornyhead Rockfish	2.95
Northern Rockfish	22.05
Pacific Ocean Perch	50.87
Sablefish	4.11
Halibut	2.19

The annual report information required by 50 CFR 679.5 is included below. Descriptions are very brief because the USS Co-op vessels did not harvest RPP CQ or participate in any RPP sideboarded fisheries in 2011.

**II. Inter-cooperative CQ Transfers**

USS Co-op transferred all CQ for 2011 to the Gulf of Alaska Rockfish Best Use Cooperative (“Best Use Co-op”) as allowed by 50 CFR 679.81 (4)(iii)(A-F). The transfer of CQ led to USS Co-op having a fishable CQ of “0” as described in Table 2.

Table 2: Sum CQ Transfer Out and Resulting Fishable CQ of the USS Co-op for 2011.

	Sum CQ Transfers Out (mt)	Resulting Fishable CQ (mt)
GOA Pelagic Shelf Rockfish	52.68	0
GOA Rougheyeye Rockfish	10.31	0
GOA Shortraker Rockfish	1.97	0
GOA Thornyhead Rockfish	2.95	0
Northern Rockfish	22.05	0
Pacific Ocean Perch	85.87*	0
Sablefish	4.11	0
Halibut	0	2.19



## USS Rockfish Cooperative 2011 Annual Report to NPFMC

\* The Pacific Ocean Perch CQ transfer out of 85.87 mt is higher than the initial CQ of 50.874 mt because an inter-cooperative agreement transferred 35 mt of QS into the USS Co-op in 2011.

### III. Sideboard Limits for USS Co-op and by Vessel Harvest

The USS Co-op sideboard limits are accounted for in Table 3 and are not transferrable. 50 CFR 679.81(4)(iii)(E). Sideboard limits allow for vessels with a history in other Gulf of Alaska ("GOA") fisheries to harvest up to their historical average catch levels.

Table 3: USS Co-op Rockfish Sideboards.

	Sideboard Percentage	Metric Tons
WG Northern Rockfish	4.514%	4.5
Deep Water Complex Halibut	22.744%	22.7
Shallow Water Complex Halibut	22.363%	22.3
WG GOA Pelagic Shelf Rockfish	1.319%	1.3
WG Pacific Ocean Perch	.097%	0.1

Vessel-by-vessel harvest data is unavailable and inapplicable because neither the ALLIANCE or LEGACY participated in the GOA sideboard fisheries during 2011.

### IV. Retained or Discarded Catch of CQ, Plus Sideboards by Area and Vessel

Actual retained or discarded catch of CQ, and sideboards by statistical area and vessel are unavailable and inapplicable because the USS Co-op vessels did not harvest RPP CQ or participate in the RPP sideboarded fisheries in 2011.

### V. Methods Used To Monitor Vessel Participation In Fisheries

Neither the ALLIANCE or LEGACY participated in the Central GOA rockfish or sideboarded RPP fisheries in 2011.

### VI. Actions Taken In Response to Members Exceeding Their Allowable Catch.

None of the USS Co-op members exceeded their allowable catch in 2011.

### VII. Conclusion

The transfer of all USS Co-op CQ in 2011 to the Best Use Co-op helped efficiently harvest the resource.

**Cascade Unimak Rockfish Cooperative  
Gulf of Alaska Rockfish Pilot Program  
Annual Report for 2011**

**Submitted to NMFS**

**December 6, 2011**

## INTRODUCTION

The Cascade Unimak Rockfish Cooperative (Cooperative) was one of five catcher/processor cooperatives that formed in 2011 under the Central Gulf of Alaska Rockfish Pilot Program (RPP). The Cooperative has two member vessels/licenses, the F/T Seafisher (LLG2014) and the F/T Unimak (LLG3957). This was the first year these licenses participated in the RPP as part of a cooperative. In previous years they fished as part of the limited access fishery or opted out of the program. Implementation of Gulf of Alaska FMP Amendment 85, which removed the July BSAI stand-down period for RPP catcher/processor participants, helped facilitate formation of the Cooperative.

## COOPERATIVE QUOTA HARVEST & RETENTION

The Cooperative was allocated quota for primary species (Pacific Ocean perch, northern rockfish and pelagic shelf rockfish), secondary species (rougheye rockfish, sablefish, shortraker rockfish and thornyhead rockfish), and halibut prohibited species quota in the central gulf. The Cooperative completed quota transfers for four of its allocated species and the F/T Unimak was used to harvest all cooperative quota in the central gulf (Table 1). The Alaska Region catch accounting database and observer data were the sources for this information.

Species	Initial CQ Allocation	Transfers In	Transfers Out	Total CQ	Catch	% of CQ Harvested
Pacific Ocean Perch	566.660	-	-	566.660	558.172	99%
Northern rockfish	120.753	-	19.0	101.753	98.037	96%
Pelagic Shelf Rockfish	128.565	-	91.7	36.865	21.405	58%
Rougheye rockfish	59.947	-	-	59.947	12.341	21%
Sablefish	23.911	-	5.0	18.911	9.175	49%
Shortraker rockfish	11.45	18.803	-	30.253	21.974	73%
Thornyhead	17.143	-	-	17.143	3.168	18%
Halibut	12.717	-	-	12.717	1.978	16%

Table 1. CGOA CQ allocations, transfers, and harvest in Area 630 by species. Harvested by F/T Unimak.

For the RPP, fishing occurred in Areas 620 and 630 of the central gulf. Actual retained (product weight) and discarded catch of CQ as reported in Sea-Landings is shown in Table 2. The RPP regulations stipulate that no primary or secondary species be discarded while a vessel is fishing under a CQ permit and all primary and secondary species were retained by the Cooperative.

Species	620 Retained	620 Discarded	630 Retained	630 Discarded
Pacific Ocean Perch	270.081	0	38.451	0
Northern rockfish	53.928	0	0	0
Pelagic Shelf Rockfish	12.957	0	0.105	0
Rougheye rockfish	0.000	0	8.064	0
Sablefish	1.554	0	5.187	0
Shortraker rockfish	0.105	0	22.596	0
Thornyhead	1.176	0	1.743	0

Table 2. F/T Unimak actual retained product weight and discarded catch from the central gulf reporting areas.

#### COOPERATIVE SIDEBOARD HARVEST & RETENTION

In addition to the Cooperative's allocations in the central gulf, it had sideboard limits for a variety of rockfish species in the western gulf and West Yakutat and for deep-water and shallow-water halibut throughout the gulf (Table 3). The F/T Unimak was used to harvest sideboards in West Yakutat (Area 640) and the F/T Seafisher harvested sideboards in the western gulf (Area 610). No sideboard limits were exceeded by the Cooperative.

Species	Sideboard Limit	Catch	% of Sideboard Harvested	Retained	Discarded
Pacific Ocean Perch (WG - 610)	275.789	168.540	61%	91.267	0.516
Northern rockfish (WG - 610)	30.227	0.478	2%	0.040	0
Pelagic Shelf Rockfish (WG - 610)	12.071	1.068	9%	0.481	0
Pacific Ocean Perch (WY - 640)	1,061.871	1,040.812	98%	565.845	0
Pelagic Shelf Rockfish (WY - 640)	246.921	24.266	10%	15.057	0
GOA Deep-water Halibut	10.222	3.146	31%	n/a	n/a
GOA Shallow-water Halibut	0.249	0	0%	n/a	n/a

Table 3. Cooperative's western gulf and West Yakutat sideboard limit, catch, production, and discards.

## **HARVEST & AGREEMENT MONITORING**

The Cooperative used custom software (E-Harvest and CatchPoint) to monitor each vessels catch of quota and sideboard species. Each haul was sampled by onboard fishery observers and their data imported into custom software that extrapolated the sample data to the entire haul. In this manner, each vessel was able to monitor their catch on a haul-by-haul basis to ensure no limits were exceeded. Daily reports were also sent to the Cooperative, who also monitored catch and progress towards harvest limits. No violations of the Cooperative's membership agreement occurred and the Cooperative did not take any actions against any member.

## **SUMMARY**

The RPP has been a successful program and participants have benefited from the rationalized rockfish fisheries in the central gulf. As the RPP sunsets and we move to a new management regime under the revised rockfish program we hope that participants continue to receive the same benefits and operating flexibility that has been afforded under the pilot program and that rationalization of the other groundfish fisheries in the gulf will someday be accomplished.

**AUDIT OF SALMON CLOSURE ZONE  
COMPLIANCE MONITORING,  
BEARING SEA POLLOCK FISHERY, 2012**

Prepared for  
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March 2012

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## Background

Closure zones were established for the Bering Sea pollock (*Theragra calcoogramma*) fishery to ensure that fishing vessels would avoid areas with the potential for substantial bycatch of chum salmon (*Oncorhynchus keta*). Vessel Monitoring System (VMS) units monitored the movement and location of fishing vessels, and fisheries observers and vessel logbooks recorded whether vessels were actively fishing. Sea State, Inc. establishes these closure zones and monitors vessel compliance of these zones using VMS data. In addition to these requirements, The National Oceanic and Atmospheric Administration (NOAA) Fisheries, Alaska Region, requires “an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance” be prepared for the pollock fishery. The audit, which NOAA required be based on an “[e]xamination of a randomly selected subset of vessel/days representing 10% of the catch” was conducted by ABR, Inc.—Environmental Research and Services (hereafter, ABR) for Sea State, Inc. This report presents the analytical methods used to evaluate Sea State’s salmon closure zone compliance monitoring, and the results of the audit.

## Study Objectives

The objectives of the audit were twofold: (1) assess the compliance of fishing vessels within salmon closure zones by sampling 10% of the 2011 fishing effort, and (2) compare the audit findings with Sea State’s conclusions regarding closure violations.

## Assumptions

The audit is based upon the following assumptions, which we have not independently verified:

1. Fishing observer data are always correct, and these sources never report non-fishing activity when fishing actually was occurring, or fishing activity when vessels were not fishing.
2. The following data provided by Sea State are free from errors: the table of VMS locations; the tables of observer data indicating haul start and stop times, and catch weights; the tables used to determine coop membership.
3. All coordinates specified in the VMS location tables and vessel closure announcements were in the same horizontal datum, namely World Geodetic System 1984 (WGS1984).



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## **Audit Methods**

### **Subset Selection**

The pollock fishery has three major sectors (Cather / Processors, Catcher vessels supplying motherships, and Catcher vessels supplying shoreside fish processors), but all vessels now have fisheries observers on board, so we no longer distinguish between the sectors in our analysis.

Although the NOAA Fisheries requirement stipulated that “vessel/days representing 10% of the catch” were to be audited, we did not interpret this literally because fish catches were not reported by day. Catch was reported for each haul and/or for each individual fishing trip. These catch totals might cover a portion of a day or portions of multiple days. We believe our sampling method, described below, was consistent with the intent of the permit stipulation.

Data collected by fisheries observers provided full coverage for the fishery with start times, stop times, and catch weight for each haul. To randomly select vessel/days representing 10% of the catch, individual hauls were selected without replacement until the total number of hauls exceeded 10% (Appendix 1).

### **Identification of Candidate Closure Zone Violations**

Before performing any analyses on the VMS location data, we verified the closure locations and tier status information by examining all closure notification memos and building closure polygons based on these memos. The dates that a closure applied for each permit cooperative unit (coop) was also recorded from the original memos.

All VMS points (i.e., a ‘point’ is a specific latitude-longitude coordinate for the fishing vessel) were then passed through a series of geoprocessing operations and database filters to reduce the full set of data down to a limited number of potential closure zone violations.

First, the VMS points were intersected with the dataset of closure polygons (i.e., the geographic area of the closure zones) for all points that were within a closure when the closure was operational. This overlay excluded all points that were outside of closure zones, or were inside zones when the closure was not in effect. Each occurrence of a point within a closure zone resulted in an output table row linking the VMS point with the closure zone.

Next, these intersections of VMS points and closures were reduced by removing all intersections that weren’t part of the 10% random sample of trips or hauls we generated earlier. The remaining point / closure intersections represent the list of ‘candidate’ (i.e. possible) violation points.

### **BUFFER FILTER**

There were four data providers for VMS locations: Faria, SkyMate / Nobletec, CLS America, and Thrane and Thrane. We only have information on the accuracy of the Thrane and Thrane system. For these locations we applied a two-stage buffering operation, forming a polygon from each point by adding and subtracting a pair of data trans-

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mission error terms ( $\pm 0.000333$  degrees for rounding errors and  $\pm 0.000667$  degrees for truncation errors) to each location, and then applying a second 30 meter buffer representing the positional accuracy of the satellite locations. For the other three systems, we had no information on how the data was transmitted or the accuracy of individual locations, so we applied a simple 30 meter buffer around each point.

The buffered polygon boundaries around each location point were next compared to closure zone boundaries. When the buffer polygons were partially outside the closure zone of interest, the corresponding points were flagged as “excluded by buffer” and these points were eliminated from further consideration.

Because of the uncertainty surrounding the different systems, we performed an analysis designed to characterize the quality of the data for each system. We made a pass through the data to determine the speed and heading of each vessel from each point to the next point along their path while the vessels were fishing, counting the number of points where speeds exceeds a reasonable threshold (7 knots).

The results of this analysis are not adequate to characterize the accuracy of individual points and was not used in filtering process, but they useful in determining the data quality of each VMS provider.

#### TIER STATUS FILTER

Location points that still remained as candidate violations were then compared to the tier status reports to determine whether the vessel was exempt from the closure restrictions at the time of the candidate violation. Some closures applied to all vessels, regardless of tier status. Other closures were advisory only, and so technically did not apply to any vessels. The remainder of closures applied to only certain vessels—some vessels were exempt, based on past performance of their coop at avoiding salmon by-catch. Candidate violations that occurred when the vessel was exempt from closure restrictions were flagged as “exempt from closure due to tier status” and excluded from further consideration.

At this point, all remaining observations with observer data were considered closure zone violations. These observations were flagged as “possible violation.”

#### SPEED FILTER

For those locations that have been flagged as “possible violation,” we examined the speed of those locations to identify any locations where the speeds were large enough that they could indicate an inaccurate satellite position, or a vessel that was actually running rather than fishing. We applied the simple speed threshold we developed for our assessment of the 2006 season [MacanderDissing2007]. This is an automated way to filter out many points that clearly corresponded to rapid vessel travel, rather than potential fishing activity.

The speed filter applied several criteria to candidate violations to determine whether they could be excluded on the basis of vessel speed. Locational points met the speed test criteria and were excluded based on a high sustained speed, if they had 1) GPS coordinates, 2) at least 5-min elapsed time from the previous point, 3) at least 5-min elapsed time to the next point, 4) a calculated speed of  $>5.6$  knots from the previous

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point, and 5) a calculated speed of >5.6 knots to the next point. Accuracy of the speed filter was able to predict fishing activity correctly for 99.83% of examined points in 2006 [MacanderDissing2007]. The low failure rate of this method is acceptable, especially because visual examination of the points in question is likely to have a similar, if not higher, failure rate.

To develop the data necessary to apply the speed filter, the minimum sustained speed and the time interval to and from successive VMS locations was calculated for all of the trips. Speeds were calculated from the difference in time and the distance between successive VMS locations. These values corresponded to a minimum speed because vessels traveling a zig-zag course between two observations would have a speed higher than the calculated speed. Candidate violations from that met our speed test criteria were flagged as “excluded due to high sustained speed.” These data were excluded from further consideration.

## VISUAL EXAMINATION

The remaining candidate violations were reviewed manually. In the past, we have noted that some of the points that did not pass the conservative speed test corresponded to non-fishing activity. For example, some points, which were just below the speed threshold, were along a straight line with several other points that did meet the criteria of the speed filter. Points that did not meet the speed test, but which were determined to correspond to running out to the fishing ground (based on visual review), were flagged as “excluded by manual review: vessel running.” These data were excluded from further consideration.

Remaining points corresponded to fishing in closure zones, and will be flagged as “possible violation.” Violations will be reported to Sea State and the North Pacific Fisheries Management Council (NPFMC). A database containing the relevant attribute data for these violations, and maps for each violation, would be provided to Sea State and NPFMC.

## Comparison with Sea State Determinations

A comparison of the violations reported by ABR was made to those reported by Sea State. All of the location points that were part of ABR’s 10% selection were considered in this assessment.

# Results and Discussion

## Identification of Candidate Closure Zone Violations

### IDENTIFYING CANDIDATE VIOLATIONS

The identification of candidate violations was entirely automated, without any interpretation or subjective thresholds (Table 1). This automated approach efficiently reduced the number of points requiring closer examination from 562,155 for the total fishery to the 25 locations that were assessed for potential closure zone violation. Many of the

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original set of VMS locations were for vessels not in the fishery, which is why the 10% subset is smaller than would be expected.

Table 1: Number of vessel locations considered at different stages of the closure violation audit, Bering Sea pollock fishery, 2011.

Category	Locations
All VMS Locations	562,155
Select 10% of Hauls or Trips	13,712
Points in Closure when Closed (Candidate Violations)	25
Violations	25

#### CATEGORIZING CANDIDATE VIOLATIONS

A small degree of subjectivity is involved in setting the buffer distances and vessel speed thresholds, as well as in the process of reviewing vessel tracks manually. We believe, however, that our approach was cautious, well-documented, and reasonable. After applying the buffers, tier status, speed threshold, and a visual review, the number of candidate violations remained at 25 (Table 2).

Table 2: Results of ABR review of candidate violations of the closure zones, Bering Sea pollock fishery, 2011.

Category	Total
Candidate Violations	25
Excluded by buffer	0
Excluded based on tier status	0
Excluded by speed filter	0
Excluded by visual review	0
Violations	25

We found 25 candidate violations that could not be exonerated by our processes. These locations were for a single vessel, fishing in three chum salmon closure zones that were in effect for their coop (Figures 1, 2, and 3).

#### Analysis of VMS location systems

Table 3 shows the results of our analysis of the accuracy of each of the VMS location providers. Of primary concern in this result is the high frequency of points from the SkyMate / Nobletec and CLS America systems where the speed calculated from one

point to the next was greater than the likely maximum rate of travel while fishing. In addition, the large difference between mean and median speed, and the high standard deviation of fishing speeds calculated from SkyMate / Nobletec positions is further evidence that the accuracy of the locations from this system are suspect. We recommend the data providers be required to identify the accuracy of their systems, preferably in such a way that the accuracy of individual points can be assessed, and that the reporting interval be more frequent.

Table 3: Speed analysis of four different VMS location providers during fishing activity, Bering Sea Pollock fishery, 2011.

VMS location system	Average speeds (knots)	Median speed (knots)	Standard deviation	Frequency of high speed locations
Thrane and Thrane	3.28	3.38	1.25	0.22
CLS America	3.90	3.25	2.88	17.82
Faria	3.13	3.29	0.97	0.41
SkyMate / Nobletec	4.93	2.83	25.94	5.97

## Comparison with Sea State Determinations

A complete list of candidate violations was compiled and for each candidate violation we identified, our verdict and the verdict of Sea State are listed (Appendix 2). Of the 13,712 candidate locations in our 10% sample, both Sea State and ABR excluded 13,687 positions as potential violations based on their not being in a closure zone when it was closed, or because the vessel belonged to a coop whose tier status meant the closure didn't apply. We found 25 locations for a single vessel fishing in three separate closure zones when the closures were in force for the coop they were a part of, and none of our filters excluded these locations from being violations. Sea State identified the same 25 violating locations.

We found that our verdicts agreed with Sea State's determination in all cases. Our 10% subsample did not identify any errors in Sea State's original determinations, and we did not further investigate locations outside of our subsample.

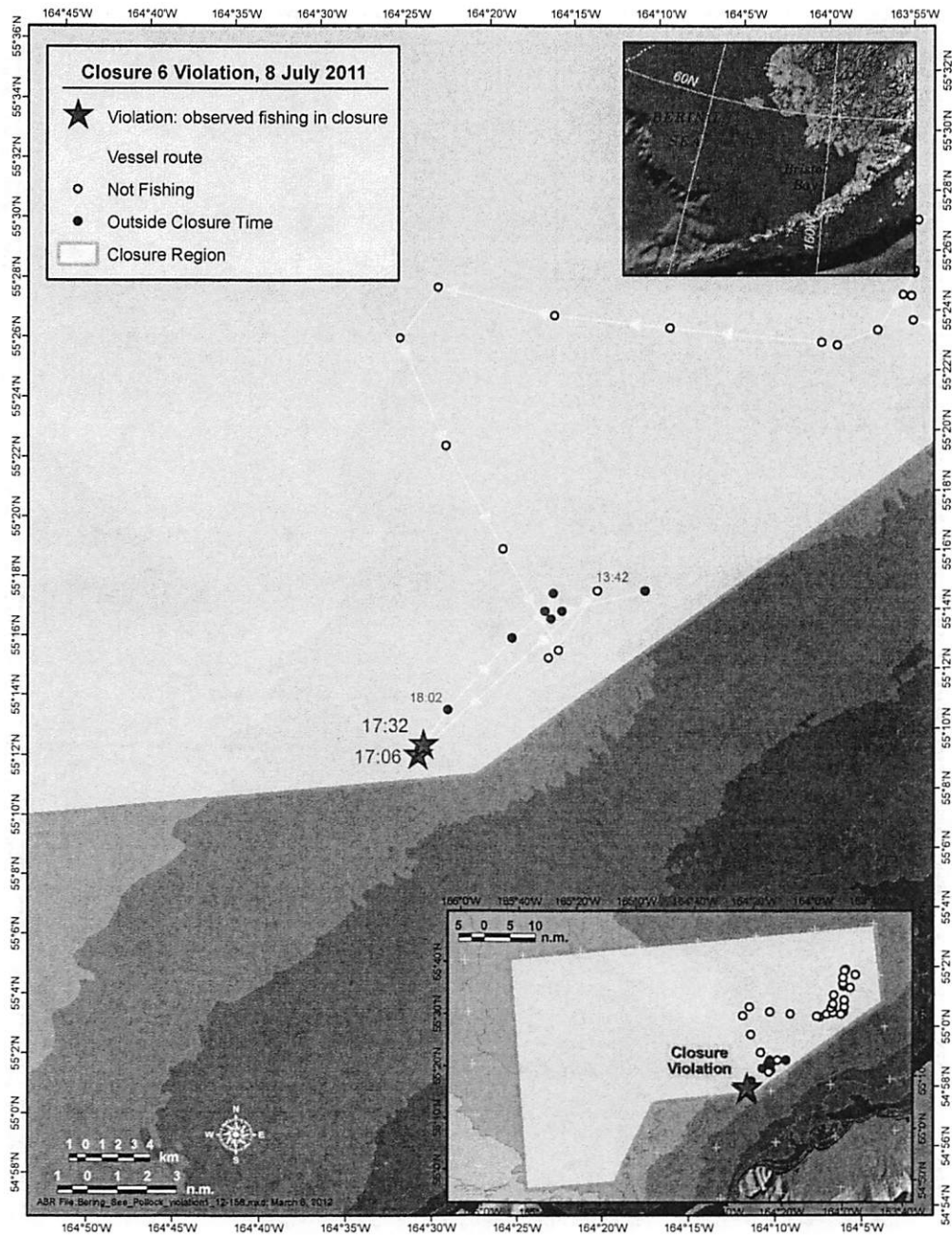


Figure 1: Closure 6 violation

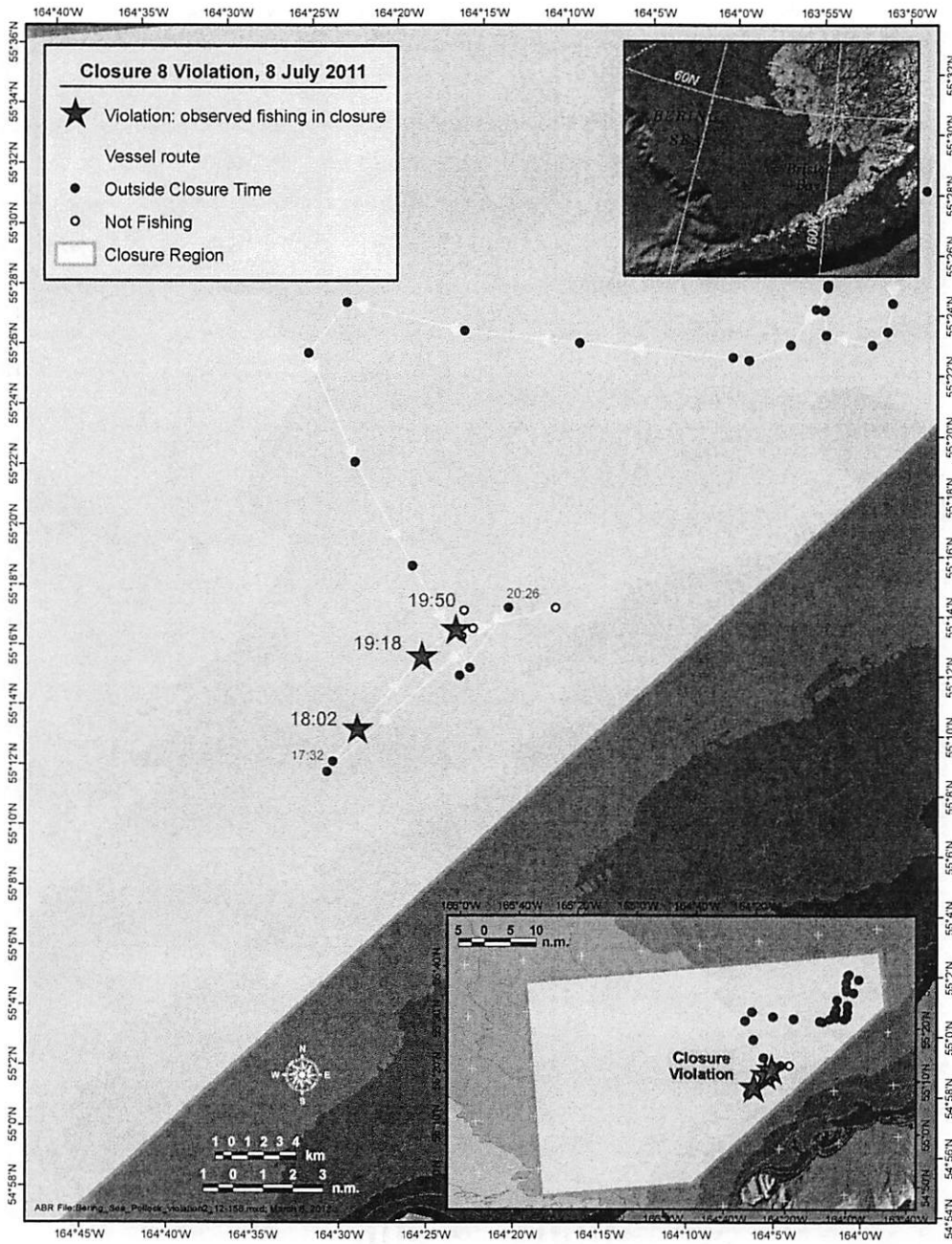


Figure 2: Closure 8 violation

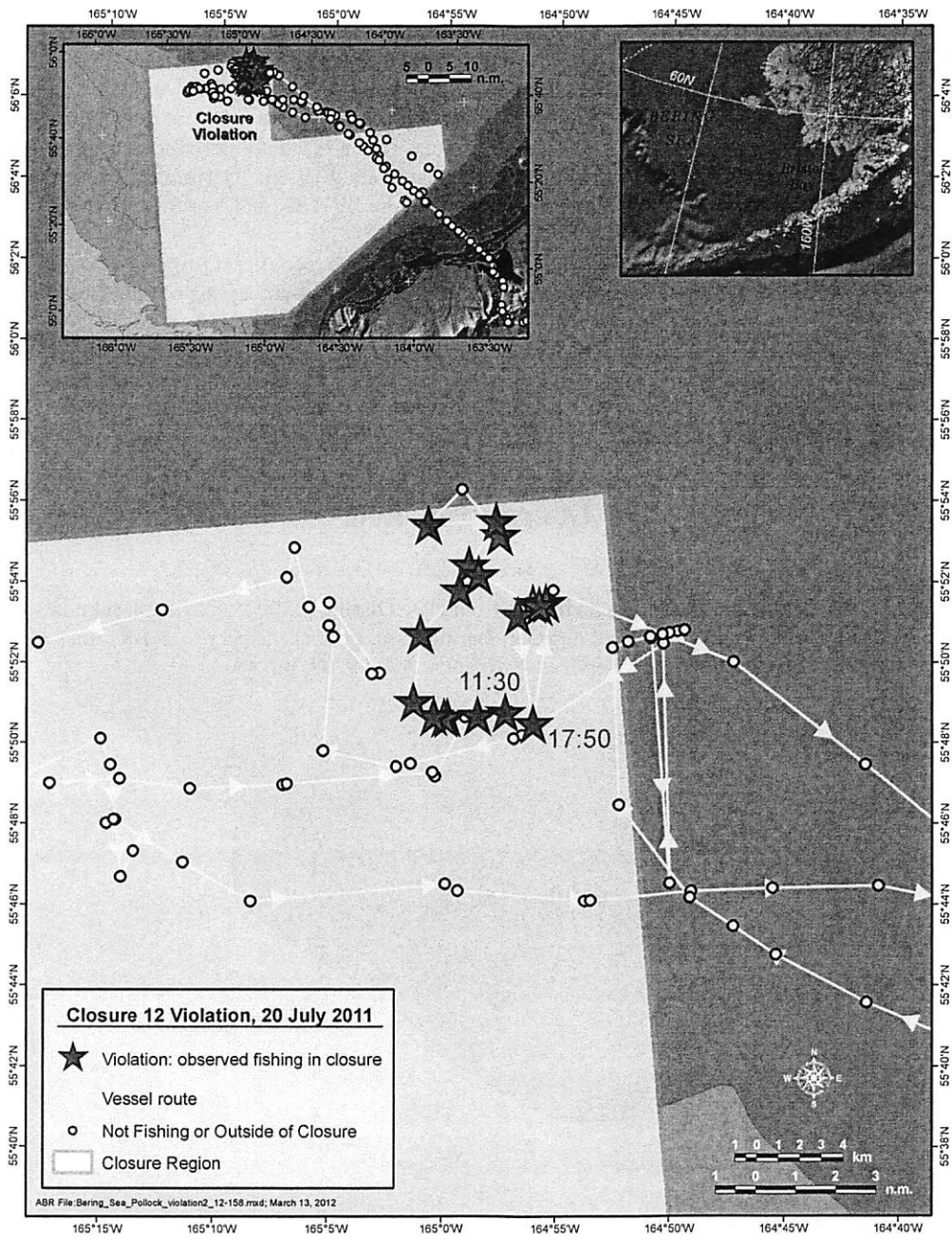


Figure 3: Closure 12 violation



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## Conclusions

ABR agreed with the determinations of Sea State for the 10% sample that we examined. Of points examined, our determination agreed with Sea State for all 13,712 candidate locations in our subsample. Minor discrepancies in the reason points were excluded were found, but this is because our filtering methods differed. Despite differences in methods, however, there was complete agreement by ABR and Sea State on final verdicts.

With the exception of the closure zone data, which we reconstruct from the closure documents, ABR's assessment was based on our review and processing of data tables developed and provided by Sea State, Inc. As a result, our audit does not systematically assess any errors that might have occurred during Sea State's data compilation process. This could be addressed in the future by extending the compliance audit to include a systematic comparison of raw data (such as the raw VMS files) with Sea State's tables for a fraction of each table.

## Literature Cited

[MacanderDissing2007] Macander, M.J. and D, Dissing. 2007. Audit of salmon closure zone compliance monitoring Bering Sea pollock fishery. ABR, Inc.-Environmental Research & Services, Fairbanks, AK, 99708. pp. 48.

# Alaska Seafood Cooperative Report to the North Pacific Fishery Management Council for the 2011 Fishery

March 23, 2012

Prepared by Jason Anderson and Beth Concepcion



## **Introduction**

On September 14, 2007, the National Marine Fisheries Service (NMFS) published a final rule implementing Amendment 80 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands management area (BSAI). Amendment 80 provides specific groundfish and prohibited species catch (PSC) allocations to the non-American Fisheries Act (AFA) trawl catcher processor sector and allows the formation of cooperatives. Sector allocations and the formation of cooperatives were intended to assist compliance with the Groundfish Retention Standard (GRS) program.

On January 20, 2008, the Alaska Seafood Cooperative (AKSC) began fishing Amendment 80 allocations. This report summarizes AKSC, its catch for the 2011 fishing year, the processes implemented to ensure that catch limits are not exceeded, and issues affecting AKSC members.

## AKSC membership

During 2011, AKSC was comprised of the following six member companies, and sixteen non-AFA trawl catcher processors.

Company	Vessel	Length Overall
M/V Savage	Seafisher	211
Fishermen's Finest, Inc.	American No. 1	160
	U.S. Intrepid	184
Iquique U.S., L.L.C.	Arica	186
	Cape Horn	158
	Rebecca Irene	140
	Unimak	184
Ocean Peace	Ocean Peace	220
O'Hara Corporation	Constellation	165
	Defender	124
	Enterprise	124
United States Seafoods, LLC	Seafreeze Alaska	296
	Legacy <sup>1</sup>	132
	Alliance	107
	Ocean Alaska	107
	Vaerdal	124

<sup>1</sup> The Prosperity LLP is assigned to the Legacy.

## **Coop management**

AKSC activities are governed by a Board of Directors, which is appointed by AKSC Members (Members). Additionally, owners, captains, crew, and company personnel participate and provide input to the cooperative management process. The Members executed a cooperative agreement after extensive discussion and negotiation that outlines harvest strategies, harvest shares, and agreement compliance provisions. The agreement is amended as necessary to improve cooperative management of allocations and PSC, and to comply with regulatory programs.

The AKSC Manager is responsible for day-to-day cooperative management. This includes facilitating communication among the fleet, member companies, and AKSC staff; ensuring compliance with the AKSC agreement and regulatory programs; tracking the AKSC budget; coordinating Board meetings and AKSC activities; ensuring harvest shares are distributed in a timely and accurate manner; and managing the AKSC office and staff. The Manager also completes all cooperative reporting requirements in a timely manner, including applying for annual AKSC catch allocations. Finally, the Manager coordinates with other staff on research, protected species issues, and community outreach to provide catch and operational transparency.

AKSC also employs a full-time Data Manager. The Data Manager is responsible for tracking individual vessel catch and bycatch information relative to allocations; providing regular reports to the coop; securely archiving data; identifying and resolving data errors; and working with the Alaska Region and Observer Program offices to ensure timely information streams. The Data Manager also provides Geographic Information System support and analysis as needed.

Finally, AKSC members employ Seastate, Inc., which assists as a third party in management activities. Seastate, Inc. is the direct observer data link for many of the processes and activities described in this document, specifically, identifying bycatch issues and tracking historic catch and bycatch trends.

## **Harvest strategy**

AKSC has implemented several protocols and practices to maintain regulatory compliance and ensure allocations are not exceeded. These are described below.

Subsequent to receiving annual cooperative allocations, AKSC and Seastate, Inc. staffs calculate individual vessel harvest shares and PSC limits. For each internal harvest share and PSC allocation, a reserve is established so that both individual vessels and AKSC as a whole have a buffer that will be reached prior to the allocation limit. Vessels may not fish into their reserve without Membership approval.

The AKSC agreement also establishes a mechanism for Members to transfer quota among themselves, and other Amendment 80 cooperatives. These transfers must be approved by the AKSC Manager, and may be facilitated by AKSC staff.

### **Catch monitoring**

AKSC receives data from several different sources. Generally, this includes total catch and species composition information from the North Pacific Groundfish Observer Program, Alaska Fisheries Science Center; total catch and species composition information from the Alaska Region; and production data from the Alaska Region. These data are used by NMFS to debit quota accounts and calculate groundfish retention.

The AKSC Data Manager receives observer data, which are archived in a database. The database allows the Data Manager to track various Amendment 80 quota accounts, bycatch amounts, catch of other non-Amendment 80 targets, and transfers among Members. The Data Manager uses the database to summarize catch information and distribute regular catch reports to vessels and AKSC members. The Data Manager also performs routine data quality checks on observer data, and resolves any discovered errors with individual vessels and NMFS.

NMFS Alaska Region quota catch information is provided to AKSC staff on a secure website. As noted above, this information constitutes official AKSC catch. As a quality control measure, the Data Manager compares these data with the corresponding observer data, and resolves discrepancies.

In addition to receiving regular reports from AKSC staff, Seastate, Inc. provides each Member and AKSC staff access to a secure website. This webpage provides vessel owners with vessel-level catch information for Amendment 80 quota species, GOA sideboarded species, and other species of interest. Additionally, the Seastate, Inc. website displays information on vessel and cooperative GRS levels.

AKSC vessels submit daily production reports through a NMFS software program called Elandings. AKSC also collects this information to keep a running tally of vessels' Retention Compliance Standard (RCS).

Observer information is transmitted from the vessel, to the Observer Program Office at the Alaska Fisheries Science Center, then to the Alaska Region office. Data undergoes initial error checking, and individual observer sample amounts are expanded to total catch amounts.

By the time Alaska Region catch information is available to AKSC staff, company representatives, and vessel captains, it is two or three days old. To address this delay, companies have purchased software packages that expand raw observer sample data to total catch amounts,

and assign catch amounts to quota categories. These data expansions mirror NMFS algorithms that expand raw observer sampling data. This software allows vessel captains to analyze catch amounts on a real time basis, and make informed fishing decisions to maximize harvest amounts while minimizing the possibility of vessel overages.

To help ensure accurate quota accounting and compliance, NMFS requires vessels to implement an extensive monitoring package at their own expense:

- 200 percent observer coverage, nearly all hauls are sampled
- Motion-compensated observer scale
- Flow scale for weighing the entire catch
- No mixing of hauls
- No fish on the deck outside of the codend
- Only one conveyor line at the point the observer collects a sample
- Each vessel must be certified to maintain one of three bin monitoring options
- Larger observer sampling station
- Vessel Monitoring System

The above list is collectively designed to improve data quality. High quality catch estimates are important to AKSC members and provide increased confidence in NMFS management information, thus facilitating intra-cooperative trades and quota management.

In addition to these extensive monitoring requirements, AKSC vessels and companies comply with recordkeeping and reporting regulations. While recordkeeping and reporting requirements are complex and create a significant burden to vessel captains and company representatives, these efforts create an authoritative, timely, and unambiguous record of quota harvested.

The Environmental Assessment/Regulatory Impact Review/Final Regulatory Flexibility Analysis prepared for regulations implementing Amendment 80 indicates that monitoring and catch accounting challenges are greater and more complex than other quota programs. To address these challenges and ensure quota limits are not exceeded, NMFS has required, and AKSC vessels have implemented, the extensive and expensive monitoring program described above.

### **GOA sideboard management**

Regulations limit Amendment 80 vessels to historic catch levels by establishing sideboard amounts for several species. To help manage GOA sideboard fisheries, AKSC established a GOA fishing plan. The 2011 GOA fishing plan described management measures AKSC utilized

to ensure individual vessels had access to historical GOA catch amounts for certain rockfish fisheries, and halibut PSC.

**Rockfish Pilot Program management**

In 2011, AKSC vessels participated in the Rockfish Pilot Program Limited Access fishery, and others were members of two Rockfish Pilot Program cooperatives. For the Limited Access fishery, AKSC staff communicated with NMFS to provide daily catch information to establish appropriate closure dates for Amendment 80 rockfish sideboards and the Rockfish Pilot Program catcher processor sideboards.

**2011 AKSC Catch**

The following tables provide AKSC catch. All data is rounded to the nearest whole number for reading simplicity. *AKSC catch during the 2011 fishing year fell within allocation levels, and no overages occurred.* It's important to understand that fishing behavior and catch amounts under any given year of cooperative operations may not reflect those of other years. Several examples are provided below in the section titled *OY, TAC setting, Amendment 80 operations, and the need for increased flexibility.*

AKSC initially apportions its annual NMFS-issued allocation to individual companies or vessels. Subsequently, AKSC companies are able to engage in transfers with other AKSC companies or vessels to maximize harvesting efficiencies. Additionally, AKSC engaged in trades with another Amendment 80 cooperative. Because allocations are managed under hard caps, some portion of each of AKSC's allocations will be left unharvested to serve as a buffer prior to reaching allocation amounts.

*Bering Sea and Aleutian Islands AKSC Allocated Quota and Catch Amounts*

Species	AKSC A80 Allocation (mt)	AKSC Catch (mt)
Cod (Total)	23,232	21,139
Yellowfin Sole	*89,814	85,424
Rock Sole	55,576	42,388
Flathead	29,773	6,965
POP 541	2,095	2,045
POP 542	1,841	1,812
POP 543	3,436	3,403
Mackerel 541	13,694	13,558
Mackerel 542	3,809	3,765
Mackerel 543	545	17

Notes: AKSC received a yellowfin sole reallocation of 1,151 mt on Oct 5. Allocation amounts marked with an asterisk "\*" include those amounts. AKSC A80 Allocation amounts also include quota transferred to or from the cooperative.



*Bering Sea and Aleutian Islands AKSC PSC Limits and Catch Amounts*

Species	AKSC A80 Allocation	AKSC Catch
Halibut Mortality (mt)	1,708	1,321
King Crab Z1 (#)	*95,104	24,557
Bairdi Z1 (#)	*410,906	167,238
Bairdi Z2 (#)	*898,620	268,709
COBLZ Opilio (#)	*3,538,834	204,540

Notes: Halibut mortality is reported as metric tons and crab mortality in numbers. AKSC received a Zone 1 red king crab reallocation of 25,198, a Zone 1 Bairdi crab reallocation of 182,328, a Zone 2 Bairdi crab reallocation of 517,479, and an Opilio crab reallocation of 839,312. All of these reallocations occurred on Oct 19. Allocation amounts marked with an asterisk "\*" include those amounts. Additionally, AKSC A80 Allocation amounts include quota transferred to or from the cooperative.

*Bering Sea and Aleutian Islands Salmon Catch Amounts*

Species	AKSC Catch (#s)
Chinook	563
Non-Chinook	2,715

Notes: Salmon are reported as individual fish.

*Northern Bristol Bay Trawl Area Yellowfin Sole and Halibut Catch Amounts*

During presentation of the AKSC cooperative report at its April 2011 meeting, the Council requested that the following year's report include catch information from the Northern Bristol Bay Trawl Area (NBBTA). The NBBTA fishery occurs in the summer, but ice conditions in Bristol Bay affect the timing of that fishery. 2011 yellowfin sole and halibut catch amounts from the NBBTA follow.

Species	AKSC Catch (mt)
Yellowfin Sole	4,850
Halibut	1.67

**Retention Compliance Standard**

The Retention Compliance Standard (RCS) replaced the Groundfish Retention Standard (GRS) beginning in 2011. Regulations implementing the GRS were removed by NMFS through Emergency Rule (and pending proposed and final rulemaking) due to implementation and enforcement issues that became evident after implementation of A80. Details of the GRS issues, and the process for removing the GRS can be found in the EA/RIR/IRFA prepared for this action (<http://www.fakr.noaa.gov/npfmc/analyses/GRS211.pdf>).

To continue high levels of groundfish retention in a transparent manner, the Amendment 80 sector proposed to internally monitor and enforce groundfish retention according to the standards established under Amendment 79. The RCS is implemented through a civil contract with substantial non-compliance fines, and an annual third party audit report provided to the Council. The implementation of the contract mirrors the details of Amendment 79 to avoid confusion, and is calibrated to reflect differences between the calculation described in Amendment 79 and that used to enforce the GRS standard.

The RCS agreement, including the calculation methodology, is appended to this report.

***The RCS requires 2011 groundfish retention of 85 percent; AKSC achieved a groundfish retention of 95.2%.***

According to Council discussions at the February 2011 meeting, a critical component of the industry monitored groundfish retention program is a third party audit. The results of this audit are also appended to this report.

### **Findings and Future Issues**

The following section highlights management programs and issues that concern AKSC members. Most of these issues were described in previous cooperative reports and are available at: <http://www.fakr.noaa.gov/sustainablefisheries/amds/80/default.htm>. Issues discussed in these previous reports are briefly summarized in the bullets below. New issues are discussed subsequent to this summary.

- For various reasons, Pacific cod has become a constraining species for Amendment 80 fishermen, and most Pacific cod is harvested as bycatch in other target fisheries. In 2011, only 1,189 mt of the 21,139 mt harvested by AKSC was reported in the cod target. Addressing Pacific cod allocations and revising several management regulations would increase Amendment 80 operational efficiencies.
- On December 13, 2010, NMFS issued an interim final rule to implement additional SSL protection measures (75 FR 77535). These protection measures significantly reduced fishing opportunities for Atka mackerel and Pacific cod in the Aleutian Islands. These closures are also expected to create spillover effects to other Amendment 80 fisheries.
- In 2008, 2009, 2010, and 2011 AKSC was able to operate within PSC allocations using 70, 83, 81, and 80 percent of its halibut mortality allocation respectively. AKSC used a lower portion of its crab limits during these years. However, fishing behavior, halibut distribution, cooperative operations vary due to environmental and market conditions. Additionally, total halibut biomass amounts are near record levels, and the current

biomass features a increasing numbers of smaller halibut. These small halibut are difficult to exclude using traditional halibut excluders.

***OY, TAC setting, Amendment 80 operations, and the need for increased flexibility***

At its February 2011 meeting, the Council considered a concept that provided additional harvesting flexibility for Amendment 80 flatfish species. Any approach adopted by the Council would maintain it's current 2 million mt optimum yield harvest policy, and individual species harvest would remain below acceptable biological catch limits. To facilitate development of such a concept, the Council asked industry to clarify operational constraints in this report.

As biomasses fluctuate over time, TACs are adjusted accordingly. During years where pollock, Pacific cod, and flatfish biomasses are simultaneously high, industry and the Council must make difficult allocation choices to remain below the statutory 2 million mt BSAI optimum yield (OY) limit. During years when non-Amendment 80 species TACs are high, lowered Amendment 80 TACs result in reduced flexibility and may prematurely stop fishing, particularly with lower yellowfin sole, rock sole, flathead sole, and Pacific cod TACs. The Amendment 80 sector must support TAC amounts that allow for maximum harvest of all species in a wide range of environmental conditions.

To ensure that cooperative quotas are not exceeded, AKSC distributes quota among each of its active vessels, and vessel captains are required by internal agreement to remain below their allocations. At the beginning of each year, companies establish fishing plans for their vessels based on expected environmental conditions, bycatch limitations, and market conditions. In practice, these can rarely be estimated with any precision, and actual fishing plans change throughout the year.

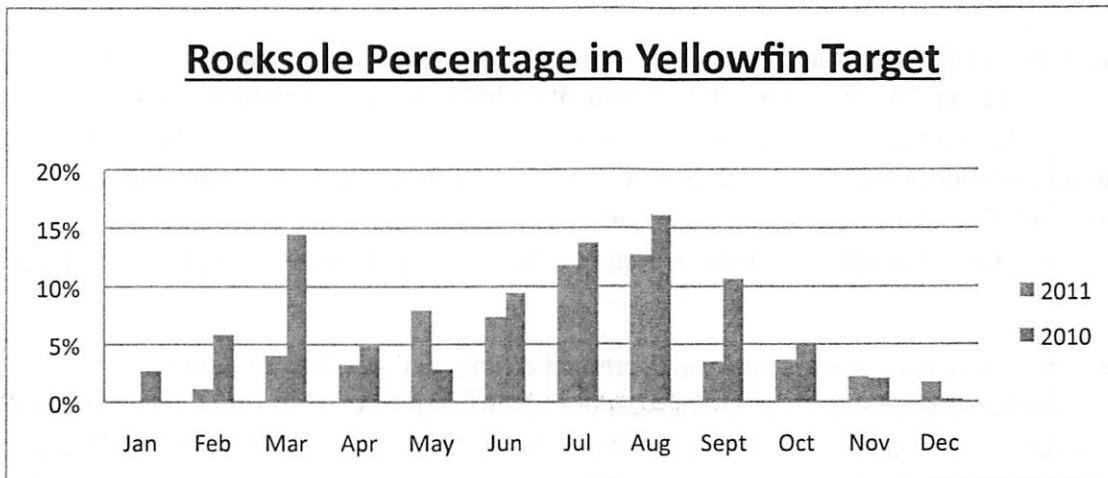
Early in the year, many companies make strategic trades in an effort to maximize their quota portfolio. However, bycatch rates, ice conditions, vessel breakdowns, markets, and other variables are unpredictable. A prudent vessel operator balances these unknowns, and maintains quota balances to increase operational flexibility throughout the year. Underharvesting potentially limiting species early in the year allows maximization of others throughout the remainder of the year.

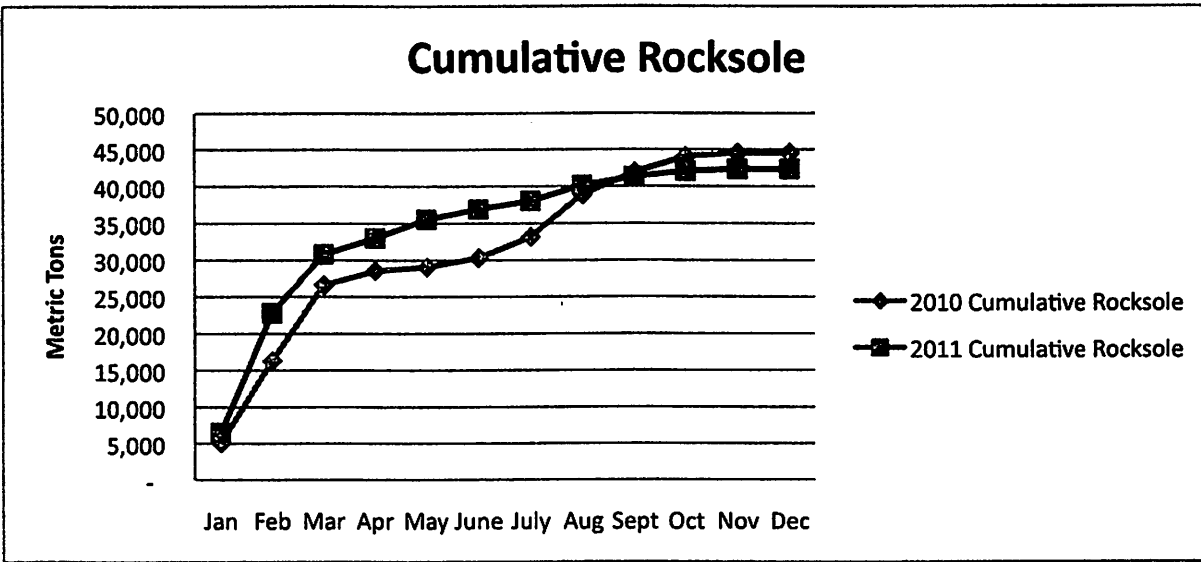
For example, most AKSC companies participate in the late winter rock sole with roe fishery. Because rock sole is hard capped, vessels must maintain a rock sole quota balance to support fishing throughout the remainder of the year. In 2011, vessel captains were conservative and intentionally left a portion of their rock sole unharvested, anticipating that these amounts would be needed during the course of summer and fall yellowfin sole fisheries. This decision was based on 2010 catch rates as a reasonable proxy for 2011. However, rock sole were less aggregated later in the year than they had been at the same time in previous years, and AKSC left 24 percent of its allocation unharvested.

The following table shows rock sole rates in the AKSC yellowfin sole fishery from 2008 through 2011. Rock sole rates vary greatly by year and month (e.g., September). Based on 2010 catch rates from June through September, captains constrained their winter rock sole with roe fishery. However, actual rates during this time were much less. This table illustrates the difficulty of managing rock sole quota from year to year.

Percent Rock Sole in Yellowfin Sole Target (Rock sole to all Groundfish)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2008	7%	9%	9%	4%	10%	3%	16%	5%	5%	5%	3%	3%
2009	0%	2%	6%	3%	4%	5%	14%	9%	6%	4%	1%	0%
2010	3%	6%	14%	5%	3%	9%	14%	16%	11%	5%	2%	0%
2011	0%	1%	4%	3%	8%	7%	12%	13%	4%	4%	2%	2%

The following figures show a comparison of rock sole rates in the yellowfin sole target for 2010 and 2011, and cumulative rock sole catch. By the beginning of August, cumulative rock sole catch amounts were essentially equal. However, as shown above, 2011 rock sole rates decreased significantly beyond what was experienced in 2010. The difference in catch rates resulted in lower 2011 cumulative catch, and some AKSC rock sole went unharvested. Vessel captains could not have predicted a decrease in rock sole rates in the 2011 fall yellowfin sole fishery. If 2011 rock sole rates would have been similar to 2010, AKSC rock sole catch would have been almost 2,000 mt higher.





As of March 19, 2012, several AKSC vessels from one company have temporarily stopped fishing due to several factors. First, rock sole were abundant and vessel managers curtailed rock sole fishing in favor of maintaining rock sole quota balances to support later year flatfish fishing. Second, ice cover extended into traditional yellowfin sole grounds, eliminating yellowfin sole fishing opportunities. Finally, these vessels traditionally focus on flatfish fishing, and have limited quota for other non-flatfish Amendment 80 species.

Other companies continue to target rock sole, also encountering high rock sole abundance. These companies are essentially gambling that later year rock sole rates will be similar to 2011. However, if rates during fall yellowfin sole fishing mirror those in 2010, some vessels may need to prematurely cease targeting yellowfin sole.

Since AKSC began operations in 2008, AKSC companies have become increasingly adept at maximizing quotas within the context of Amendment 80 hard caps and changing conditions. Companies are less conservative, and internal and external trading has increased. However, due to the current multispecies hard cap nature of Amendment 80 fisheries, these constraints will continue to limit flatfish harvest because companies must maintain a balance of each flatfish species that is sufficient to allow for both operational flexibility and annual fluctuations in actual catch rates.

As noted above, Amendment 85 resulted in decreased cod allocation relative to other allocated species. The following table reflects cod harvest during 2011. AKSC's 2011 total cod allocation was 23,232 mt, while its total allocation for all Amendment 80 species was 222,740 mt. Because cod is harvested in all fisheries, most vessel captains aim for about 10 percent cod relative to all other Amendment 80 species.

**2011 AKSC Pacific Cod Percentage Relative to Amendment 80 Flatfish Target**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Percent Cod	10%	11%	7%	12%	8%	6%	22%	16%	9%	16%	9%	11%

In July and August, cod rates in the summer yellowfin sole fishery jumped to 22 and 16 percent respectively. Consequently, most captains chose to leave the yellowfin sole grounds until cod rates decreased. These captains searched for other lower bycatch fisheries, such as arrowtooth flounder.

As the season winds down and captains are better able to predict quota needs, companies may intentionally increase cod harvest to the extent that aggregated cod can be found. However, cod do not tend to aggregate later in the year, and cod bycatch rates in other fisheries vary widely by year. Additionally, where cod aggregations can be found, captains are prohibited by Steller sea lion regulations from directed fishing for cod beginning November 1.

Halibut PSC reflects a similar scenario. By regulation, the Amendment 80 halibut PSC allocation has been reduced by 200 mt over four years. However, Amendment 80 allows captains to leave areas of high halibut bycatch without losing fishing opportunities to other vessels, and overall halibut bycatch has been reduced beyond regulatory allocation reductions. The following table shows 2011 AKSC halibut bycatch by month and fishery. Blank cells indicate that no target fishing occurred in that month.

**2011 AKSC Halibut Rates (kg/mt)**

Target	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Flathead sole		34		28	16	23	5	2	28	2		
Yellowfin sole		0	2	4	1	7	14	7	2	5	10	34
Rock sole	6	7	4	8	7	18	9	7	7	23	66	

Notice the relatively inconsistent halibut rates associated with flathead sole target fishery. For the last several years, high halibut rates, high cod rates, and ice cover during typical flathead sole fishing times have resulted in lower than average flathead sole harvest. However, these conditions are impossible to predict during the TAC setting process. In any given year, environmental conditions may change: halibut and cod bycatch in the flathead sole fishery may decrease, and increase in the yellowfin sole fishery. If this occurs, flathead sole may become a more viable target fishery, or flathead sole may be interspersed with other flatfish targets. In

either case, maintaining higher flathead sole quotas are important under the current Amendment 80 management scenario.

The Council is currently scheduled to review a discussion paper at its June 2012 meeting that would address several of the issues described above. Providing additional inseason management flexibility would allow Amendment 80 quota managers to address year-to-year variability within the flatfish fisheries. This could provide relief for the Council TAC setting process by reducing the need to fund quota categories at minimum levels to accommodate unpredictable environmental changes.

### **Research and Outreach**

In addition to harvesting and processing activities, AKSC is actively engaged in several projects to improve the natural and human environment affected by fishing operations. These are briefly described below.

#### *Reducing halibut mortality*

AKSC believes operating as a cooperative increases incentives for individual bycatch accountability and optimal use of halibut bycatch mortality limits. AKSC vessels now have a direct relationship between how they utilize their halibut bycatch mortality allowances and how much of their allocated and non-allocated target species are harvested. Therefore, AKSC companies continue to improve utilization of halibut excluders and how they avoid bycatch hotspots through data sharing. Potential reductions in halibut mortality rates through improved halibut handling procedures is another important part of the AKSC's goal to make best use of its halibut bycatch allowances. Increasing halibut survivability is critical to the development of an adequate set of tools to accommodate Amendment 8 halibut PSC reductions.

During a 2009 EFP, AKSC explored alternative halibut handling procedures designed to return halibut to the sea faster, and decrease halibut mortality rates. The average mortality rate for halibut sorted on deck was 45 percent. This was a reduction of almost 50% relative to the current average mortality rate assigned to the EFP target fisheries (75 percent is the current average mortality rate applied to the BSAI flatfish fisheries). Average sorting time on deck for the EFP overall was approximately 27 minutes from the time the net was brought aboard to the time the last halibut was returned to the water or deck sorting was completed.

A subsequent Phase II to this EFP will be conducted in 2012. This EFP will explore additional fisheries and vessels, and incorporate subsampling techniques that should allow sea samplers to return halibut to the sea even quicker. Results of this second EFP will be provided at a subsequent Council meeting.

### *Community outreach*

AKSC representatives have traveled to western Alaska communities to engage with community leaders. During several trips to Nome, Bethel, Dillingham, and Anchorage, AKSC met with representatives from the Bering Sea Elders Group, Kawerak, the Association of Village Council Presidents, the Bristol Bay Economic Development Corporation, the Bristol Bay Native Association, the Qayassic Walrus Commission, and the United States Fish and Wildlife Service. AKSC discussed operations under Amendment 80, provided catch information, and described research to reduce trawl effects to the benthic habitat.

During 2011, AKSC has met several times with the Bering Sea Elders Group, Association of Village Council Presidents, Trustees for Alaska, Native American Rights Fund, and Alaska Marine Conservation Council to consider whether current closures adequately protect western Alaska subsistence resources in the Etolin Strait/Nunivak Island area, while still maintaining access to important flatfish fishing grounds.

Because careful halibut bycatch management is so important to AKSC's ability to harvest its target species allocations, AKSC captains avoid areas with high halibut rates as much as possible. As high concentrations of yellowfin sole migrate across the Bering Sea shelf, AKSC vessels follow these schools as they typically represent high catch per unit effort (CPUE) and low halibut bycatch. As the ice clears, large yellowfin sole spawning schools congregate in very shallow water. At certain times of the year, these may be the only low bycatch areas. Displacement to other areas would result in higher CPUE, longer bottom times, increased costs, and additional habitat effects.

These shallow yellowfin spawning areas are sometimes adjacent to western Alaska communities. Community members have expressed concern to AKSC and the Council about all vessel activities, and their affects on local commercial and subsistence harvests. Our experience thus far has shown that effective communication between communities and the industry is possible and may preclude the need for the Council to take formal action in resolving disputes.

### **Looking forward**

The following is a list of regulatory changes that would increase efficiencies, add flexibility, and help AKSC vessels meet Amendment 80 goals. We welcome the opportunity to work with the Council and NMFS to accomplish these changes.

#### *Change the January 20 annual season start date*

January 20 has traditionally been the regulatory start date for all trawl fisheries. This date was established for several reasons, including providing trawl vessels with a single fair start date several weeks after the holiday season. Because AKSC vessels are allocated most of their



traditional target species, allocated PSC limits, subject to hard caps on these limits, and subject to sideboards on non-traditionally harvested species, the Council has eliminated many of the competition scenarios the January 20 start date was designed to mitigate.

This artificial start date creates stress on many of the vendors that we depend on, particularly the shipyards, airlines, and hotels. By moving the January 20 start date back to January 1 for the Amendment 80 sector, AKSC vessels would have additional flexibility to schedule fishing operations around environmental and biological conditions of the fishery, and plan non-fishing or shipyard times. It would also provide twenty additional fishing days, which would be beneficial in allowing us to harvest our quotas.

*Provide regulatory mechanism for inter-sector trades*

With the formation of the freezer longline cooperative, inter-sector trades of allocated species has become possible. Allowing Amendment 80 and freezer longliners to transfer cod and halibut provides additional flexibility for both sectors.

*Remove November 1 cod closure for trawl vessels*

As noted above, SSL regulations designed to eliminate directed cod fishing later in the year require NMFS to place cod on bycatch status, and result in discards as vessels operate later in the year. Removing this closure will reduce waste of Pacific cod caused by forced discards, and will also reduce the cost of avoiding cod that are an increasing fraction of the groundfish biomass.

**Summary**

The Council has designed, and NMFS has implemented, a well-designed program that provides AKSC with the necessary tools to effectively manage Amendment 80 fisheries, minimize bycatch to the extent practicable, and increase retention. AKSC and its member companies are working hard to maximize the goals of Amendment 80 by implementing internal data management and quality control measures that enable companies and vessel captains to maximize allocations. Amendment 80 is arguably one of the most successful, highly regulated rationalization programs to date. For 2011, AKSC catch amounts for this complex multi-species fishery were well below regulatory limits, and the groundfish retention goals have been exceeded. While AKSC companies are pleased with these successes, they have identified management elements that could be improved, and look forward to addressing these with the Council and NMFS.

## Attachment 1

### Amendment 80 Sector Retention Compliance Standard Agreement

The North Pacific Fishery Management Council established regulatory retention levels based on historic retention performance for the Amendment 80 fleet. However, while the Amendment 79 analysis in front of the Council examined historic retention rates based on observer estimates in the blend and catch accounting system, the Council ultimately chose to measure retention using groundfish retention standard (GRS) methodology.

Implementation of the GRS resulted in the discovery that the retention calculation methodologies used in the Amendment 79 analysis and the GRS were not equal. As described in the Appendix to this Agreement, these differences averaged nine (9) percent for the Alaska Scafood Cooperative (AKSC). In 2008, the first year of the program, the AKSC retained 91 percent of its groundfish as measured by the Amendment 79 calculation methodology, far beyond the 65 percent required by regulation. However, the GRS calculation methodology only measured retention at 77 percent.

At its June 2010 meeting, the North Pacific Fishery Management Council recommended that NMFS implement an emergency rule to temporarily remove groundfish retention standard regulations. The emergency rule would be in effect while a permanent FMP amendment solution is developed that addresses issues associated with Amendment 79 implementation and enforcement.

To continue to meet Council bycatch reduction goals during development of an alternative retention program, Amendment 80 participants have voluntarily agreed to maintain current high groundfish retention levels by complying with the following retention compliance standard (RCS). In this Agreement, the term "parties" refers to any Amendment 80 cooperative and individual entities assigned to the Amendment 80 limited access fishery.

1. **Retention Compliance Standard.** Parties agree to meet or exceed an annual RCS of 85 percent (see appendix) using the following calculation methodology:

$$RCS = \frac{\text{Retained Groundfish Catch (Production RWE)}}{\text{Observed Total Groundfish Catch (CAS)}} + 9\%$$

This is the same calculation methodology currently used by NMFS to calculate the GRS, and is annually calculated using the following data inputs:

- Retained groundfish catch is calculated as the total annual round weight equivalent of all retained groundfish species as reported in production data.
- Groundfish catch includes those species listed in Table 2a to 50 CFR 679.
- Observed total groundfish catch is calculated by flow scale measurements, less any non-groundfish, PSC species or groundfish species on prohibited species status.

The RCS is measured on an annual basis. Each Amendment 80 cooperative agrees to meet or exceed the RCS of 85 percent. Each entity participating in the Amendment 80 limited access fishery agrees to operate each of its vessels in such a manner that they meet or exceed the RCS of 85 percent.

2. Monitoring Service. Parties agree that Seastate, Inc. will calculate each vessel or cooperative's annual RCS. Parties agree to take all actions and execute all documents that may be necessary to enable the Monitoring Service to calculate the RCS. In the event of a disputed RCS, an entity or cooperative may verify that data and calculations are correct. However, parties agree to Seastate, Inc. RCS calculations for purposes of compliance with this agreement.

3. Liquidated Damages Calculation. Liquidated damages described below are based on the recommended range of penalties found in the *Draft Policy for the Assessment of Civil Administrative Penalties and Permit Sanctions, NOAA Office of the General Council – Enforcement and Litigation*. That document can be found at [http://www.rmf.noaa.gov/ole/draft\\_penalty\\_policy.pdf](http://www.rmf.noaa.gov/ole/draft_penalty_policy.pdf).

Number of Offenses	Liquidated Damages Amount
1 <sup>st</sup>	\$25,000
2 <sup>nd</sup>	\$50,000
3 <sup>rd</sup> and every thereafter	\$100,000

4. Notice of Apparent Breach. The Monitoring Service shall monitor compliance with the terms and conditions of this Agreement. The Monitoring Service shall notify each party of any party who is out of compliance with the RCS.
5. Liquidated Damages Collection and Related Expenses. A party will pay liquidated damage amounts within ten (10) days of the notification described above. Liquidated damages will be remitted to:

SeaShare

600 Erickson Avenue NE, Suite 310  
Bainbridge Island, WA 98110

Liquidated damages amounts not paid when due shall accrue interest at a rate of interest equal to the prime rate of interest announced by Bank of America as of the last day of the voluntary compliance period plus twelve percent (12%). In addition to liquidated damages, parties shall be entitled to an award of the reasonable fees and expenses, including attorneys' fees, a party incurs in connection with any action the party pursues to collect liquidated damages from the party in breach of this Agreement.

6. Annual third party audit. Each party agrees to conduct an annual audit of the RCS calculation and the data used within the calculation. Results of this audit will be reported to the parties, and the Council (see below.)
7. NMFS and Council reporting. Each party agrees to report its annual RCS to the Council at each April Council meeting. Cooperatives will include the RCS in their annual cooperative report, and Amendment 80 limited access participants shall create an RCS report. Each report will include the results of the third party audit above.
8. Agreement Term and Termination. This Agreement shall take effect January 20, 2011 and shall remain in effect until replaced by regulations implementing a Council approved groundfish retention program or until amended by the parties.
9. Miscellaneous.
  - a. This Agreement contains the entire understanding of the parties as to the matters addressed herein, and supersedes all prior agreements related to the same. No amendment to this Agreement shall be effective against a party hereto unless in writing and duly executed by such party.
  - b. This Agreement shall be governed by and construed in accordance with applicable federal law and the laws of the State of Washington. Venue for any action related to this Agreement shall be in King County, Washington.
  - c. The parties agree to execute any documents necessary or convenient to give effect to the intents and purposes of this Agreement.

- d. All notices to be given hereunder shall be in writing and shall be deemed given upon the earlier of when received or three days after mailing addressed in accordance with the attached contact information.
- e. This Agreement shall be binding on the successors and assigns of all parties hereto.
- f. In the event that any provision of this Agreement is held to be invalid or unenforceable, such provision shall be deemed to be severed from this Agreement, and such holding shall not affect in any respect whatsoever the validity of the remainder of this Agreement.
- g. Any dispute related to this Agreement shall be submitted to arbitration in Seattle, Washington upon written request of any party. The party's written request shall include the name of the arbitrator selected by the party requesting arbitration. The other party shall have twenty (20) days to provide written notice of the name of the arbitrator it has selected. If the other party timely provides such notice, the two arbitrators shall select a third arbitrator within twenty (20) days. If the other party fails to select an arbitrator within such period, then arbitration shall be conducted by the single arbitrator originally designated. However, if the other party responds within such period and designates an arbitrator, the three arbitrators so selected shall schedule the arbitration hearing as soon as possible thereafter. Every arbitrator, however chosen, shall have experience in, or experience advising entities that have experience in, the commercial fishing industry of the Bering Sea, shall have no material ties to either party to the dispute, or to any other Amendment 80 Quota Share holder unless the parties agree otherwise, and shall have executed a confidentiality agreement satisfactory to the parties. The decision of the arbitrator, or, in the case of a three-arbitrator panel, the decision of the majority, shall be final and binding. The arbitrator, or, in the case of a three-arbitrator panel, the majority of the arbitrators, shall select the rules of arbitration.
- h. Nothing contained in this Agreement shall be construed to make the parties to this Agreement partners, joint venturers, co-owners or participants in a joint or common undertaking. The parties may otherwise engage in or possess an interest in other business ventures of every nature and description, independently or with others, including but not limited to the ownership, financing,

management, employment by, lending to or otherwise participating in businesses which are similar to the business of the other parties, and no party shall have any right by virtue of this Agreement in and to such independent ventures or to the income or profits therefrom, nor shall any party by virtue of this Agreement be subject to any obligations or liabilities arising out of or related to such businesses. The parties agree that their mutual obligations under this Agreement extend only to their groundfish retention activities, and nothing in this Agreement shall be construed as permitting or obligating its parties to collaborate in any other manner.

10. Faxed or Electronic Signatures; Counterparts. This agreement may be executed in any number of counterparts, each of which shall be an original, and all of which, taken together, shall constitute one and the same instrument. Signatures transmitted by facsimile or electronic mail are fully effective for all purposes.

EXECUTED as of December 27, 2010.

## Appendix I

### Analysis of Proposed Retention Compliance Standards

Amendment 79 currently requires that the Amendment 80 sector meet a retention standard that increases from 65% in 2008 to 85% in 2011. The Amendment 79 analysis examined the changes in retention percentages by looking at historical data. Throughout the analysis, computations of historical retention percentages and increased retention tonnages were made using "blend" and/or catch accounting system (CAS) data. Total catch and retained catch were derived from these data sources, both of which use a mixture of production and observer data as the basis for calculations. Thus, retention percentage based on the blend (from here on "blend" refers to either the older blend formula or the post-2003 CAS estimate) would be determined as:

$$Rb = \frac{\text{Retained catch (blend)}}{\text{Total catch (blend)}}$$

where (*blend*) indicates a data source that is comprised of a mix of observer and production data. The Council ultimately chose to define a groundfish retention standard expressed as the ratio of the round weight equivalent of retained product to total catch, or:

$$GRS = \frac{\text{Retained catch (production RWE)}}{\text{Total catch (blend)}}$$

Throughout the Amendment 79 analysis, there exists an implied assumption that the retention percentage calculated by the new GRS method would be the same as the retention percentage calculated by Rb. However, this assumption was not examined in the analysis and no production round-weight equivalents were presented that would allow a reader to compute the GRS standard that was adopted. Data presented below indicate that the GRS formula returns a significantly lower number than the Rb retention percentage calculation used throughout the analysis. The effect of this difference is to require much greater retention of catch by the Amendment 80 fleet than was anticipated by the Council.

The Amendment 80 sector had, preparatory to coop formation, requested blend, CAS, and WPR information from NMFS. An analysis of those historic data shows a marked contrast to results and conclusions on the effects of the various Amendment 79 alternatives presented in the analysis. In the first year of operation under Amendment 79, vessel operators were able to increase both Rb and GRS dramatically. The GRS is consistently less than Rb, and AKSC vessels were still only able to achieve 77% under the GRS calculation. Using the Amendment 79 analysis methodology (i.e., with Rb as a proxy for GRS), Rb increases from 77% to 91% between 2007 and 2008. However, the fleet's apparent retention is still only 77% because it is now measured by GRS rather than Rb.

Harvest and retention by Blend/CAS and produce RWE for AKSC vessels. Tremont (<125') excluded 2005-2007 because of incomplete data. Seastate data received from NMFS.

Year	Blend / CAS total catch	Blend / CAS retained catch	Production report retained catch	Blend / CAS retention (Rb) %	Groundfish retention standard retention (GRS) %	Difference: CAS-GRS
1999	155,667	101,856	88,633	65%	57%	8%
2000	178,563	120,474	98,705	67%	55%	12%
2001	158,781	116,455	102,434	73%	65%	9%
2002	190,247	132,061	116,800	69%	61%	8%
2003	188,257	129,620	114,116	69%	61%	8%
2004	217,658	145,767	130,801	67%	60%	7%
2005	201,586	153,673	136,311	76%	68%	9%
2006	196,360	151,422	133,929	77%	68%	9%
2007	211,325	163,437	147,119	77%	70%	8%
2008	260,296	235,580	200,161	91%	77%	14%
2009	251,602	226,886	203,673	90%	81%	9%
Average	200,940	152,476	133,880	75%	66%	9%

The average difference between the 1999-2009 blend and GRS calculations is 9%. Therefore, GRS percentages would need to be adjusted downward to meet Council intended retention goals as they understood them during deliberations of Amendment 79. These adjustments are reflected in the following table.

GRS Schedule	Annual GRS	Annual RCS
2010	80%	71%
2011 and each year thereafter	85%	76%

[SIGNATURE PAGES FOLLOW]



Attachment 2

FISHERIES INFORMATION SERVICES  
413 SW Butterfield Place Corvallis, OR 97333  
541-602-1609

Jason Anderson  
Manager, Alaska Seafood Coop

March 23, 2012

PROCEDURES FOR AUDIT OF RETENTION COMPLIANCE STANDARDS FOR ALASKA SEAFOOD COOP

PURPOSE and DEFINITIONS:

The purpose was to provide an independent determination of annual retention rate of groundfish for Alaska Seafood Coop (ASC) boats in Bering Sea/Aleutians (BSAI) groundfish fisheries in 2011. The rate is defined as round weight equivalent of all retained groundfish (production) divided by observed total groundfish catch.

DATA SOURCES and CONFIDENTIALITY:

FIS agreed with ASC to keep all data confidential. All raw data is in the purview of National Marine Fisheries Services (NMFS). After receiving permissions from each company, NMFS Alaska Region staff provided to FIS data for each of the sixteen boats that participated in 2011 cooperative fisheries.

DATA SCOPE and FORMAT:

Data was received for 16 boats. There are two types of data. *Production* data was aggregated by species and product type, converted to round weight equivalence. *Observed total groundfish catch* is from the NMFS Catch Accounting System (CAS) and was aggregated by species group and round weight.

DATA PROCESSING:

Through the use of Excel Pivot tables, annual summaries by species for each boat were produced, including all FMP groundfish species listed on table 2a of the regulations. For each boat, total production was divided by total observed groundfish to determine its retention percentage. Total production for all boats was divided by total observed groundfish for all boats to determine the cooperative's retention percentage.

DATA RECONCILIATION AND EVALUATION

Rates that appeared to be outliers were flagged but no data errors were found. NMFS actions requiring discards of skates and other rockfish occurred on Sept. 22 and Sept. 24 respectively. While *required* discards should not be included in this exercise, estimated amounts were small enough that when they were discounted, the fleet average retention percentage did not change (although retention percentages for several boats improved very slightly).

DATA SUMMARY

The totals for all sixteen boats were 250,947 mt of production (in round weight) and 291,198 mt of observed groundfish, for a Coop rate of 86.2 %.

*Janet Smoker*

Janet Smoker

Report to the North Pacific Fishery Management Council  
on the 2011  
Bering Sea Pollock Intercooperative Salmon Avoidance  
Agreement

Karl Haflinger, Sea State Inc. - Intercoop Monitor  
John Gruver, AFA Catcher Vessel Intercooperative Manager

This report is to the North Pacific Fishery Management Council and covers the Bering Sea and Aleutian Islands Management Area (BSAI) Pollock Intercoop Salmon Avoidance Agreement ("ICA"). During the course of the B season fishery, the pollock Intercoop closed 67 areas to fishing based on high bycatch rates of chum salmon experienced by vessels working in the area. Maps of the closures are shown in Appendix 1.

Under the terms of the ICA, applicants are to submit to the Council a report analyzing:

1. Estimated number of salmon avoided as demonstrated by the movement of fishing effort away from salmon hot-spots.
2. A compliance/enforcement report that will include the results of an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance with the agreement, and a report on the effectiveness of enforcement measures stipulated under the ICA in cases of non-compliance. Examination of a randomly selected subset of vessel/days representing 10% of the catch during each season will be used as the basis of the audit.

**Number of non-Chinook salmon taken during the fishery:**

For the sake of comparison we have included catch and bycatch amounts running back to 1993. These data are compiled from plant landing information for catcher vessels delivering to shoreside processors, and observer data for mothership catcher vessels and catcher-processors. The "other salmon" category includes all non-chinook salmon.

Observer data for both offshore and shoreside deliveries show that only very small numbers of salmon other than chum in this category (for example, 152 unidentified, 31 pinks, and 5 silvers for the 2006B season EFP).

*Table 1. Catch and bycatch of pollock and salmon in the directed pollock fishery by season and for full years, 2000 – 2009.*

Year	B season pollock*	B season other salmon bycatch
1993	740,569	242,473
1994	718,582	89,117
1995	647,865	17,625
1996	633,639	77,028
1997	546,988	64,504
1998	539,432	60,040
1999	511,211	44,261
2000	631,755	57,228
2001	813,022	50,948
2002	866,034	83,033
2003	876,784	170,688
2004	858,799	427,234
2005	878,618	637,957
2006	874,435	276,779
2007	775,261	82,641
2008	572,384	14,453
2009	469,128	38,040
2010	471,983	13,585
2010	681,480	191,517

\* For the years 1993-1999, total groundfish from P and B targets, available on files from NMFS site (below), were used instead of pollock.

*Estimates of salmon bycatch for 1993-1999 are for all P and B trawl target fisheries, including CDQ, and are available on the NOAA Fisheries, Ak Region web site. (<http://www.fakr.noaa.gov/sustainablefisheries/catchstats.htm>)*

### **Evaluation of salmon savings.**

The evaluation of the number of salmon saved by the IC program is based on tracking vessels that fished in a closed area before it closed, and then comparing their subsequent bycatch to see if it was lower than expected if the area had not closed. Put more simply, we perform a before-and-after comparison of the bycatch observed and expected from the vessels that triggered the closure. The procedure is as follows:

1. Extract all observer data for haul locations falling inside a closure area, for a 5 day period preceding the closure. For shoreside catcher vessels, aggregate the hauls that have the same "start fishing date" so that hauls with the same bycatch rate are not artificially repeated. As an example, if 2 hauls from the same catcher vessel trip show up in the closed area, they will have the same bycatch rate because observers pro-rate bycatch evenly across all hauls. Consider them a single observation with a value equal to the sum of the two hauls' pollock and salmon.
2. Consider all of independent offshore sector (C/P and mothership) hauls, and combined "trip-level" hauls to be estimates of the bycatch ratio  $R_i = \sum y_i / \sum x_i$ , where y are counts of chinook or chum salmon, and x is the pollock catch from individual hauls (offshore sector) or grouped, same-trip hauls (shoreside), and i indicates a separate closure.
3. Extract the same haul or "grouped" haul information, for the same vessels, for the duration of the closure (either 3 or 4 days). Their associated bycatch is available from either observer or plant delivery information. Compute their expected bycatch had they been able to stay and fish inside the now-closed area, by summing the pollock catch of all vessels in this category, and multiplying this summed pollock catch by the matching bycatch ration,  $R_i$  above.
4. Compute the standard error of this estimated Y (overall salmon bycatch if vessels had stayed in the area and fished with bycatch rate R) treating R as a ratio estimator (Snedecor and Cochran, Statistical Methods, 8<sup>th</sup> Edition, p 452).

**Avoidance results from the 2010 Intercoop Agreement**  
 Locations of the 2011 closures are shown in Figure 1.

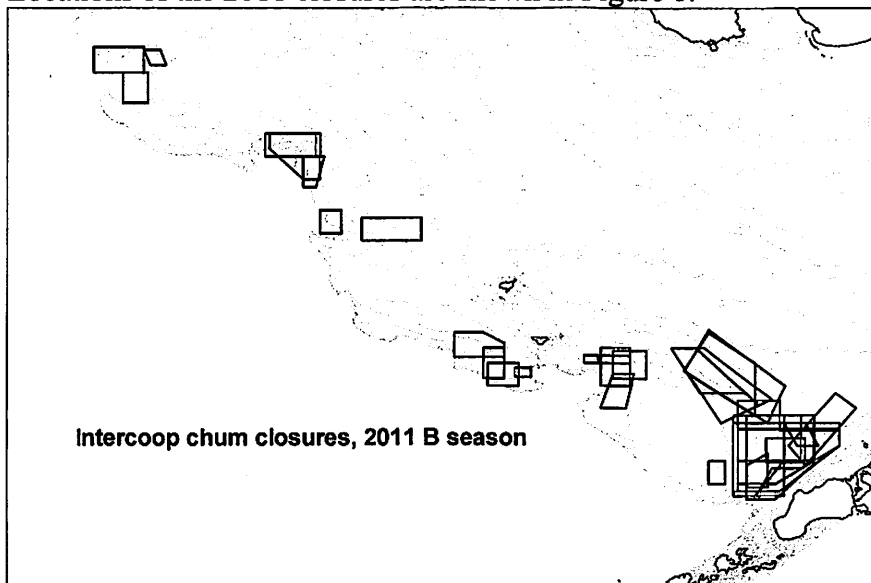


Figure 1. 2011 IC chum closures

Table 2 summarize of the results for both chum and chinook savings resulting from these closures (Appendix Tables A1a-c show the underlying data, by closure, with associated standard errors). An estimated 86,338 mt of observed groundfish was associated with boats that fished inside areas before they were closed. These same vessels caught an estimated 146,846 mt of groundfish in the five day interval following the respective closure. An estimated 79,657 fewer chum were taken outside the closures than would have been expected had the same amount of pollock been taken inside the closures, based on the comparison of rates inside and outside closure areas. Chinook reduction were minimal: 76 chinook fewer taken than the estimated 1,154 that would have been caught at within-closure rates. These bycatch reductions represent a 63% decrease in expected chum bycatch, and a 7% decrease in expected chinook bycatch.

Table 2. Chum salmon closure effectiveness

Closure statistic	Bycatch species	
	Chinook	Chum
Pollock catch (inside, before closures)	86,338	86,338
Pollock catch (outside, after closures)	146,846	146,846
Actual bycatch (outside closures)	1,078	46,939
Expected bycatch (at pre-closure rate)	1,154	126,596
Savings	76	79,657
% reduction	7%	63%

A comparison with results from chum closures from previous years is shown in Table 3. The "After-closure pollock" column shows the total tonnage of pollock harvested by vessels that fished inside closures in the 5-day interval before they closed. This amount of pollock can be viewed as having been moved from inside the closure area to outside due to the closures. The 2011 amount (146,846 mt) is larger as an absolute amount, and much larger as a percentage of the B season harvest, than we have seen in any other year since the program began. The number is higher than in any previous year partly because the ICA approved under the original Amendment 84 regulations was intended to protect both Chinook and chum salmon, with Chinook bycatch reduction being the higher priority. Therefore, chum RHS closures were discontinued once Chinook RHS closures were triggered. The implementation of Amendment 91 removed all Chinook elements of the original Amendment 84 regulations, thereby eliminating the replacement of chum RHS closures for those protecting Chinook salmon. Consequently the number of chum RHS closures, and therefore the associated pollock catch moved as a result of these closures, has increased in 2011.

*Table 3. Comparison of the effects of chum closures across years.*

Year	After-closure pollock	% of harvest affected	Chinook savings	Chinook % reduction	Chum savings	Chum % reduction
2006	23,049	3%	-97	-21%	65,299	64%
2007	107,646	14%	2007	56%	75,970	82%
2008	3,448	1%	53	82%	768	73%
2009	5,701	1%	52	50%	6,270	76%
2010	12,537	3%	61	85%	1,808	84%
2011	146,846	22%	73	7%	79,657	63%

### **Compliance/ Enforcement**

Ten apparent violations were referred to coops on November 2, 2009. The coops to which these vessels belong have until May 28, 2012 to meet and decide on the validity of these apparent violations.

An audit of Sea State compliance monitoring has again been awarded to ABR Inc of Fairbanks, Alaska. ABR reviewed 10% of the coop fishing records and associated VMS information. The draft report for this audit states that:

“We found that our verdicts agreed with Sea State’s determination in all cases. Our 10% subsample did not identify any errors in Sea State’s original determinations, and we did not further investigate locations outside of our subsample”

**Appendix 1. Before-and-after closure fishing comparisons, by closure.**

Date	"Before" closure pollock	"After" closure pollock catch	"After" closure chinook	Estimated chinook catch without closure	Chinook reduction (estimate-actual)	Std Err chinook estimate	"After" closure chum catch	Estimated chum catch without closure	Chum reduction (estimate-actual)	Std Err chum estimate	Number of samples prior to closure	Number of samples after closure
06/17/11	5,600	10,392	19	7	-11	1.7	6,309	9,803	3,494	492.2	37	41
06/21/11	22,103	10,576	10	18	8	2.3	3,452	6,833	3,381	392.6	138	45
06/24/11	3,207	5,600	3	9	6	1.5	1,805	3,294	1,489	271.2	31	24
06/28/11	326	2,035	1	6	5	1.0	1,599	2,170	571	103.8	7	7
07/01/11	1,249	1,352	0	2	2	0.2	114	1,813	1,699	36.8	23	4
07/05/11	403	1,499	1	6	5	1.1	250	2,352	2,102	169.2	8	8
07/05/11	870	3,819	0	0	0	0.0	120	3,556	3,436	79.1	11	4
07/08/11	3,003	3,506	3	9	6	2.4	2,405	5,252	2,847	737.2	20	18
07/12/11	746	2,178	5	0	-5	0.0	383	4,696	4,313	700.9	9	10
07/15/11	1,283	1,832	0	4	4	2.2	1,677	1,856	180	336.6	11	13
07/15/11	4,674	12,428	8	8	-1	1.0	2,436	6,147	3,710	209.0	56	36
07/19/11	382	77	0	0	0	0.0	883	329	-555	295.1	5	2
07/22/11	4,420	5,352	17	2	-15	1.0	751	2,190	1,438	247.8	32	29
07/22/11	5,519	13,104	10	2	-8	0.2	1,140	1,522	382	45.7	57	13
07/26/11	908	2,211	16	3	-13	0.6	158	397	239	21.5	12	9
07/26/11	720	5,150	19	0	-19	0.0	2,229	1,894	-335	182.9	7	6
07/29/11	420	1,176	11	14	3	3.3	327	288	-39	26.9	6	6
07/29/11	4,220	9,747	4	9	5	0.6	1,094	10,787	9,693	270.7	47	9
08/02/11	24	22	0	1	0		53	10	-44		1	1
08/02/11	30	152	1	1	0		17	6	-11		1	2
08/05/11	666	3,517	4	0	-4	0.0	630	2,624	1,994	312.0	8	6
08/09/11	2,889	4,420	7	14	7	2.4	1,980	7,465	5,485	934.5	32	28
08/12/11	3,276	6,977	53	7	-46	1.8	2,927	3,250	324	268.6	31	35
08/12/11	886	5,597	10	13	-3	0.7	188	8,240	8,052	317.1	19	9
08/16/11	2,572	3,996	28	1	-28	0.2	1,026	2,021	995	61.7	48	16
08/19/11	5,220	4,419	56	22	-34	2.6	1,403	3,168	1,765	200.0	65	34
08/23/11	277	536	4	6	2	1.0	23	353	330	37.8	7	6
08/26/11	1,614	4,089	36	53	17	4.4	2,394	2,224	-170	119.3	28	19
08/30/11	1,985	3,235	49	10	-39	1.1	1,116	4,976	3,660	489.5	25	13
09/02/11	653	2,933	33	80	47	3.6	188	7,018	6,630	133.1	15	5
09/06/11	197	150	5	0	-5	0.0	87	590	502	44.4	2	1
09/09/11	86	294	27	1	-26		152	1,040	889		1	2
09/13/11	56	69	19	2	-18	1.5	34	89	55	2.9	2	2
09/16/11	1,861	1,079	234	231	-3	29.0	1,241	1,683	442	179.7	25	18
09/16/11	399	1,327	41	80	39	3.2	138	239	101	10.9	7	2
09/20/11	241	719	114	165	52	6.9	151	709	557	69.2	5	5
09/20/11	689	229	2	1	-1	0.6	979	485	-494	125.9	15	4
09/27/11	830	1,263	2	50	48	1.8	37	5,306	5,269	252.3	24	6
09/30/11	94	1,325	63	56	-7	3.2	214	1,815	1,601	24.4	4	4
09/30/11	582	775	8	5	-3	0.7	24	1,157	1,133	115.4	10	3
10/04/11	198	2,509	30	141	111	5.3	793	1,949	1,156	30.6	4	4
10/07/11	174	1,521	43	96	53	5.5	253	1,029	776	18.4	3	3
10/11/11	23	346	4	0	-4		38	90	52		1	1
10/11/11	860	1,929	49	4	-45	0.6	77	2,475	2,398	129.7	11	5
10/14/11	60	397	3	0	-3		17	173	156		1	1
10/21/11	43	588	24	14	-10	0.7	3,628	1,235	-2,393	24.7	2	2
	86,338	146,846	1,078	1,154	76		46,939	126,596	79,657			

## Appendix 2: Dirty 20 list appearances

Number of times each vessel was on a 2011 chum weekly dirty 20 list

Vessel	N times on list	Vessel	N times on list	Vessel	N times on list
AJ	0	Golden Alaska	0	PACIFIC CHALLENGER - MS	4
Alaska Ocean	3	GOLDEN DAWN	5	PACIFIC EXPLORER	3
ALASKA ROSE	3	GOLDEN PISCES	1	PACIFIC FURY	6
ALASKAN COMMAND	8	GREAT PACIFIC	4	Pacific Glacier	0
ALDEBARAN	3	GUN-MAR	5	PACIFIC KNIGHT	0
ALEUTIAN CHALLENGER	1	HALF MOON BAY	0	PACIFIC MONARCH	0
ALSEA	5	HAZEL LORRAINE	0	PACIFIC PRINCE	5
ALYESKA	0	HICKORY WIND	1	PACIFIC RAM	0
AMERICAN BEAUTY - INSHORE	2	Highland Light	0	PACIFIC VIKING	6
AMERICAN BEAUTY - MS	1	INTREPID EXPLORER	0	PAPADO II	0
AMERICAN CHALLENGER	0	Island Enterprise	4	PEGASUS	3
American Challenger	0	Katie Ann	0	PEGGY JO	0
American Dynasty	3	Kodiak Enterprise	4	PERSEVERANCE	0
AMERICAN EAGLE	4	LESLIE LEE	1	POSEIDON	2
American Enterprise	0	LISA MELINDA	0	PREDATOR	1
American Triumph	1	MAJESTY	0	PROGRESS	4
ANITA J	3	MARCY J	1	PROVIDIAN	0
ARCTIC EXPLORER	9	MARGARET LYN	0	RAVEN	0
Arctic Fjord	1	MAR-GUN	0	ROYAL AMERICAN	4
Arctic Storm	0	MARK I	7	ROYAL ATLANTIC	2
ARCTIC WIND	6	MESSIAH	0	SEA STORM	0
ARCTURUS	7	MISS BERDIE	0	Sea Storm	0
ARGOSY	4	MISTY DAWN	3	SEA WOLF	1
AURIGA	3	MORNING STAR	6	SEADAWN	6
AURORA	4	MS AMY	0	Seattle Enterprise	2
BERING ROSE	6	MUIR MILACH	0	SEEKER	2
BLUE FOX	4	Muir Milach	0	SOVEREIGNTY	6
BRISTOL EXPLORER	5	NEAHKAHNE	0	Starbound	3
CAITLIN ANN	5	Neahkahnie	0	STARFISH	6
CALIFORNIA HORIZON	3	NORDIC EXPLORER	0	STARLITE	3
CAPE KIWANDA	2	NORDIC FURY - INSHORE	1	STARWARD	4
CHELSEA K	7	NORDIC FURY - MS	5	STORM PETREL	1
COLLIER BROTHERS	6	NORDIC STAR	6	SUNSET BAY	0
COLUMBIA	3	Northern Eagle	2	TOPAZ	0
COMMODORE	2	Northern Glacier	0	TRACY ANNE	0
DEFENDER	5	Northern Hawk	2	Tracy Anne	0
DESTINATION	3	Northern Jaeger	3	TRAVELER - INSHORE	0
DOMINATOR	3	NORTHERN PATRIOT	9	TRAVELER - MS	3
DONA MARTITA	0	NORTHWEST EXPLORER	0	US Enterprise	0
ELIZABETH F	1	OCEAN EXPLORER	2	VANGUARD - INSHORE	0
Endurance	0	OCEAN HARVESTER	0	VANGUARD - MS	2
EXCALIBUR II	2	Ocean Harvester	0	VESTERAALEN	7
Excellence	0	OCEAN HOPE 3	0	VIKING	8
EXODUS	0	OCEAN LEADER - INSHORE	1	VIKING EXPLORER	6
FIERCE ALLEGIANCE	3	OCEAN LEADER - MS	5	WALTER N	2
FORUM STAR	0	Ocean Phoenix	0	WESTERN DAWN - INSHORE	1
Forum Star	0	Ocean Rover	2	WESTERN DAWN - MS	1
GLADIATOR	2	OCEANIC	5	WESTWARD I	3
GOLD RUSH	1	PACIFIC CHALLENGER - INSHORE	0		



**2011**

**AMERICAN FISHERIES ACT**

**ANNUAL CATCHER VESSEL INTERCOOP REPORT**

**TO THE**

**NORTH PACIFIC FISHERY MANAGEMENT COUNCIL**

**Prepared by:**

**John Gruver**

**United Catcher Boats Association**

**Seattle, Washington**

**March 28, 2012**

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## Section 1. Introduction

### 1.1 Purpose of the Catcher Vessel Intercooperative Report

The AFA Catcher Vessel Intercooperative Report is a summary of the eight catcher vessel cooperative reports required by the American Fisheries Act (AFA) regulations. While the individual coop reports track the annual activities of each cooperative at the vessel level, a summary of AFA catcher vessel harvests in the Bering Sea and Gulf of Alaska fisheries is useful as NMFS allocates the catcher vessel sideboard caps and PSC caps & triggers in the aggregate, not by individual cooperatives. The Catcher Vessel Intercooperative Report provides the North Pacific Fisheries Management Council, and the public, with a simple means of evaluating the AFA catcher vessel fleet's aggregate fishing performance under the AFA regulations. Additionally, this report provides information beyond the required regulatory elements of the individual coop reports to provide a broader understanding of catcher vessel cooperative activities.

### 1.2 The 2011 Catcher Vessel Intercooperative Agreement

The eight AFA catcher vessel cooperatives renewed the Intercooperative Agreement for 2011 with no significant changes from the 2010 Agreement. The Agreement continues to emphasize the commitment by all members towards reducing bycatch in each Bering Sea and Gulf of Alaska groundfish fishery in which they participate.

Primary elements of the Intercoop Agreement:

- 1) Allocation, monitoring, and compliance of the BSAI and GOA sideboard limits and PSC caps among the AFA catcher vessel cooperative members;
- 2) Allocation, monitoring, and compliance of BSAI pollock harvest inside the Steller sea lion conservation area;
- 3) Establishment of penalties for coops that exceed pollock and sideboard allocations;
- 4) Provides for the harvest of BSAI pacific cod by the "under 1700 mt" exempt vessels while complying with PSC limits;
- 5) Establishment and monitoring of sideboard species transfers between cooperatives;
- 6) Promotes compliance of the Council's recommended sideboard measures and PSC limits while allowing for the maximum harvest of AFA pollock and sideboard allocations; and
- 7) Promotes reduction of prohibited species catch (PSC) in the Bering Sea pollock fishery.

A copy of the 2011 Catcher Vessel Intercoop Agreement is found in Appendix I.

## 1.3 AFA Pollock and BSAI/GOA Sideboard Enforcement Actions

No coop enforcement or penalty actions regarding the over-harvest of AFA pollock, directly fished BSAI sideboard fishery caps, directly fished GOA sideboard caps, and BSAI & GOA PSC limits occurred in 2011.

## Section 2. Bering Sea Pollock Fishery

### 2.1 Allocations and Harvest

The 2011 Bering Sea pollock Total Allowable Catch (TAC) was initially set at 1,252,000 metric tons, with 10%, 125,200 mt, allocated to the CDQ pollock fishery and the remainder to both the incidental catch allowance (ICA), 33,804 mt, and the AFA directed pollock fisheries 1,092,996 mt. On March 1, 2011 the Regional Administrator determined that 14,400 mt of pollock initially allocated to the Aleutian Island subarea would not be harvested and moved 1,900 mt into the Bering Sea CDQ pollock fishery and 12,500 mt into the AFA Bering Sea pollock fishery.

The final Bering Sea pollock TAC provided the CDQ Groups with 127,200 mt and, after deducting the 33,804 mt ICA, the remaining 1,105,496 mt Directed Fishing Allowance (DFA) is allocated among the three AFA harvest sectors. The inshore sector received 50% of the DFA, 552,748 mt, the mothership sector received 10%, 110,550 mt, and the catcher/processor sector received 40%, 442,198 mt. Catcher vessels that historically delivered pollock to the c/p sector (High Seas Catchers' Coop) are allocated 8.5% of the c/p sector share, 37,587 mt.

There are a total of 111 AFA qualified catcher vessels at the start of the 2011 fishing season. The inshore sector has 98 qualified vessels of which all 98 were members of the 6 active inshore cooperatives in 2011. Two inshore vessels that participated in the Inshore Open Access Sector in 2010 are now members of inshore coops. The mothership sector has a total of 19 qualified catcher vessels; all are members of the Mothership Fleet Cooperative. Thirteen are "dual qualified" for both the mothership and inshore sector fisheries. Seven catcher vessels are qualified for the catcher/processor sector and make up the High Seas Catchers' Cooperative.

The following information on Table 2.1 provides data for the number of members in each catcher vessel cooperative; each coop's allocation percentage; each coop's pollock annual allocation; each coop's total directed pollock harvest; and the amount of pollock over or under the annual allocation.

Table 2.1a

Source: Annual Catcher Vessel Coop Reports &amp; NMFS

<b>2011 AFA CATCHER VESSEL COOPERATIVES' ALLOCATIONS AND DIRECTED FISHING HARVESTS</b>					
<b>Cooperative</b>	<b>Number of Vessels in Coop</b>	<b>Annual Allocation Percentage</b>	<b>Annual Allocation</b>	<b>Harvest in Metric Tons</b>	<b>Over / (Under) Allocation</b>
<b>INSHORE CATCHER VESSEL COOPERATIVES</b>					
Akutan Catcher Vessel Assoc.	37	32.263%	178,332	172,220.00	(6,112.00)
Arctic Enterprise Assoc.	0	0.000%	0	0.00	0.00
Northern Victor Fleet Cooperative	14	9.378%	51,837	51,806.00	(31.00)
Peter Pan Fleet Cooperative	9	2.347%	12,974	11,782.00	(1,192.00)
Unalaska Fleet Cooperative	11	11.041%	61,027	59,750.00	(1,277.00)
UniSea Fleet Cooperative	16	26.483%	146,384	133,349.50	(13,034.50)
Westward Fleet Cooperative	11	18.488%	102,194	90,642.00	(11,552.00)
<b>Inshore Coop Totals</b>	<b>98</b>	<b>100.000%</b>	<b>552,748</b>	<b>519,550</b>	<b>(33,199)</b>
<b>OFFSHORE CATCHER VESSEL COOPERATIVES</b>					
Mothership Fleet Cooperative	19	10.0% of DFA	110,550	109,856	(694)
High Seas Catchers Cooperative	7	3.4% of DFA	37,587	Details of the HSCC pollock harvest are covered in the joint PCC and HSCC report	

## 2.2 BS Pollock Harvest by GOA Exempt Vessels

There are 16 GOA Sideboard Exempt qualified vessels. Under the terms of the Catcher Vessel Intercooperative Agreement GOA exempt vessels may not lease their annual Bering Sea pollock allocation and harvest GOA groundfish in excess of their individual catch history, 1995-1997, in those GOA fisheries. The Catcher Vessel ICA does,

however, allow for small amounts of GOA exempt vessel pollock to be harvested by others under typical “sweep up” harvesting conditions (amounts less than one trip).

All AFA GOA exempt vessels met the Bering Sea pollock harvest/leasing conditions in 2011 as demonstrated in the following Table 2.1b. Similar tables for 2010, 2009, and 2008 may be found in Appendix V.

**Table 2.1b**

Source: Annual Coop Reports and conversations with coop managers.

<b>2011 GOA Exempt Vessel Bering Sea Pollock Fishing</b>					
<b>GOA EXEMPT VESSEL</b>	<b>COOP</b>	<b>Pollock Allocation</b>	<b>Pollock Harvest</b>	<b>Uncaught Pollock</b>	<b>GOA Exempt Vessel Harvest Status</b>
CAPE KIWANDA	AKUTAN	1268	8538	0	N/A
EXCALIBUR II	AKUTAN	2991	2870	121	Did Not Transfer
HAZEL LORRAINE	AKUTAN	2147	795	1352	Did Not Transfer
LISA MELINDA	AKUTAN	1185	1222	0	N/A
MARCY J	AKUTAN	994	1013	0	N/A
PACIFIC RAM	AKUTAN	1124	1079	45	Did Not Transfer
PEGGY JO	AKUTAN	1835	1483	353	Did Not Exceed GOA History
COLLIER BRS.	N. VICTOR	681	1772	0	N/A
GOLD RUSH	N. VICTOR	2357	2177	180	Did Not Exceed GOA History
OCEAN HOPE 3	N. VICTOR	2305	0	2305	Did Not Fish GOA
ELIZABETH F	PETER PAN	2128	1787	341	Did Not Transfer
TOPAZ	PETER PAN	457	525	0	N/A
WALTER N	PETER PAN	2225	2104	121	Did Not Transfer
LESLIE LEE	UNALASKA	3029	2455	574	Did Not Transfer
MORNING STAR	UniSea	2924	0	2924	Did Not Fish GOA
HICKORY WIND	Westward	1591	1499	92	Okay for Sweep Up Fishing

## 2.3 Salmon Bycatch Reduction Measures

### CHINOOK SALMON

#### 1. Amendment 91 Incentive Plan Agreements

Beginning in 2011 new regulations for reducing Chinook bycatch in the Bering Sea pollock fisheries were implemented under Amendment 91. For the first time a Prohibited Species Catch (PSC) limit for the incidental catch of Chinook salmon by pollock fishers

was in place. Reaching the limit (a.k.a. hard cap) would close directed fishing for pollock. Under the provisions of Amendment 91 there are three levels of hard caps based on a vessel's willingness to participate in an Incentive Plan Agreement (IPA). The general intent of an IPA is to reduce Chinook bycatch at all levels of abundance encountered by a fishing fleet as opposed to a traditional hard cap management approach that only alters fishing behavior when there is a danger of reaching the hard cap.

Vessels and/or CDQ groups opting to participate in an IPA would be allotted their portion of a 60,000 Chinook limit. If no vessels or CDQ Groups chose to participate in an IPA each pollock sector would receive its share of a 47,591 hard cap. Vessels and/or CDQ Groups opting out of participating in an IPA when other vessels and/or CDQ had chosen to participate in an IPA would operate under a hard cap based on those vessels share of a 28,496 Chinook limit.

The regulatory conditions of Amendment 91 do not dictate what specific types of incentives an acceptable IPA must include, but rather the outcome the incentives chosen by an IPA group must provide. Pollock fleets must submit, for approval by NMFS, an IPA that meets the following criteria:

- Provide incentives at the individual vessel level
- Incentivize vessels to avoid Chinook bycatch at all levels of abundance in all years
- Reward vessels that successfully avoid Chinook and/or penalize vessels that fail to avoid Chinook
- Incentives must influence fishing decisions at levels below the hard cap
- Hold Bycatch to a performance standard of 47,591 in most years
- The IPA must describe how the IPA ensures each vessel will manage their bycatch to keep total bycatch below the sector level regulatory performance standard

NMFS received, and approved, IPA applications from each of the three AFA sectors; Inshore, Mothership, and C/P. For 2011 all CDQ Groups and AFA vessels participated in an IPA. AFA catcher vessels participated in all three IPAs; all inshore vessels were members of the Inshore Chinook Salmon Savings Incentive Plan Agreement, all Mothership catcher vessels were members of the Mothership Salmon Savings Incentive Plan, and all members of the High Seas Catchers Cooperative joined the Chinook Salmon Bycatch Reduction Plan and Agreement.

Each IPA is required to submit an annual report to the Council by April 1<sup>st</sup> of the following year under a set of reporting requirements provided in the Amendment 91 regulations. The following Table 2.2 provides the Chinook bycatch by catcher vessels in each IPA:

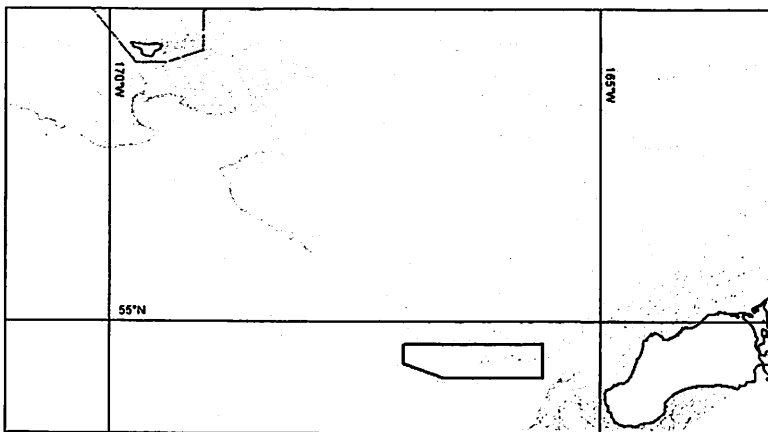
**Table 2.2**

Source: Annual IPA Reports

<b>2011 AFA Catcher Vessel Chinook Bycatch</b>	
<b>IPA Group</b>	<b>2011 CV Chinook Bycatch</b>
Inshore Chinook Salmon Savings Incentive Plan Agreement	<b>18,349</b>
Mothership Salmon Savings Incentive Plan	<b>2,426</b>
Chinook Salmon Bycatch Reduction Plan and Agreement (HSCC only)	<b>0</b> (No HSCC vessels fished pollock in 2011)

## 2. Chinook Conservation Closure Area

Beginning in 2008 all AFA coops entered into a fixed closure area agreement for reducing Chinook bycatch in the A season. Called the Chinook Conservation Area Agreement, it closes an area located in the southeastern Bering Sea to all pollock fishing during the A season. This area has been identified with a history of consistently high Chinook bycatch during the winter season. Below is a chart of the Chinook Conservation Closure Area. The full Agreement may be found in Appendix II.



## CHUM SALMON

### 1. Non-Chinook Salmon bycatch Management Agreement

In 2011 all nine AFA cooperatives and all CDQ Groups were members to the Salmon Bycatch Management Agreement. Also known as the Rolling Hot Spot (RHS) Intercooperative Agreement (ICA), the Agreement was re-written in 2010 for pollock



fishing beginning in 2011 due to implementation of Amendment 91 regulations (as previously described). Pre-Amendment 91, the RHS ICA reduced the bycatch of both Chinook and non-Chinook salmon (primarily chum salmon) via a series of closures that reduced fishing effort in areas with high salmon bycatch. With the implementation of Amendment 91 all Chinook elements of the original Amendment 84 regulations were removed, leaving the RHS ICA as only a chum salmon reduction program.

Consequently, on December 1, 2010 the industry submitted an "Amended and Restated" RHS Agreement for non-Chinook salmon to the Regional Administrator of the Alaska Region, NMFS for approval. On December 28, 2010 the industry received approval of the amended ICA. The Amended and Restated Non-Chinook ICA is found in Appendix III.

The Amendment 84 regulations provide an exemption to the regulatory Chum Salmon Savings Area (CSSA) for vessels that operate under an approved RHS ICA. As previously mentioned the RHS ICA utilizes a series of rolling hot spot closures which, twice weekly, identify areas being fished by the Bering Sea pollock fleet with the highest bycatch rates and initiates "Savings Closures" for those areas over a trigger amount. Each week individual coops, based on their member's recent bycatch performance, are assigned to a "tier level". Tier 1 for coops with the best bycatch performance, tier 2 for medium performance, and tier 3 for the lowest performance. A coop's tier level determines the amount of fishing area restriction the coop will operate under for the following week. The agreement also incorporates an element of peer pressure on poor performing vessels via three types of "Dirty Twenty Lists" that are updated and published each week. These lists specifically name the vessels with the highest bycatch rates on: 1) a weekly, 2) a 2 week rolling average, and 3) a seasonal basis. Additionally, the agreement requires tow-by-tow bycatch reporting by all AFA pollock vessels. Sea State, Inc. has been contracted to gather the data, compile it into useful information, determine tier assignments and closure areas, and monitor closure compliance by the fishing vessels.

Results of chum salmon avoidance under the Amendment 84 Rolling Hot Spot program may be found in the required Amendment 84 annual report. Also required each year is a "third party audit". The audit was conducted by ABR, Inc.; copies of both that audit and the Amendment 84 report are found in Appendix IV.

## 2. Additional 2011 Chum Salmon Avoidance Measures

The pollock fleet ran into chum bycatch very early in the 2011 B season and while there have been other instances of high June chum bycatch, chum bycatch had been low since the beginning of the current RHS ICA came into place. The June bycatch average for 2007-2010 is 2,750. The total B season chum bycatch average over the same time frame is 41,200. By the end of June, 2011 the fleet had taken 37,500 chums; a number similar to bycatch numbers in the very high chum bycatch years of 2005 and 2006. The June

chum salmon bycatch in 2005 was 20,300 and the June bycatch in 2006 was 51,000. Total B season bycatch for 2005 was 704,552 and 2006 was 309,630.

In response to the high chum numbers the industry immediately began meeting to find additional measures to reduce bycatch. In an effort to reduce chum bycatch the "Supplemental Chum Salmon Protection Agreement" was drafted and implemented as quickly as possible. Also adopted was a "Bering Sea Pollock Harvesters' Chum Salmon RHS Program Policy Statement".

#### 2011 Supplemental Chum Salmon Protection Agreement

The Agreement, specific to 2011, authorized Sea State to use an additional 1,000 square miles of possible closure are in the East Region as described in the RHS ICA through August 15<sup>th</sup>, or unless extended through additional agreement by the Coops. August 15<sup>th</sup> was chosen out of concerns that the additional closure area may have result in an increase of Chinook bycatch if left in place too late into the B season.

The Agreement also limited the weekly increase in the RHS ICA Base Rate to no more than 20%. The Base Rate controls both the areas eligible for RHS closure and the Tier level assignment for each of the Coops. Because the weekly Base Rate calculation is the result of a 3 week average bycatch rate, the 20% cap proved to be a very effective tool for controlling bycatch when chum bycatch is trending upwards.

#### Policy Statement

The Coops determined that the enforceable "black and white" elements spelled out in a bycatch reduction Agreement don't always accomplish the complete desired outcome of the Agreement. Reducing bycatch requires both black and white rules and recognition that quite often there is a gray area that rules alone do not accomplish. Therefore the Coops also adopted the following policy statement for the fleet.

**The Coops agree that Tier 1 and Tier 2 vessels entering an RHS closed area should do so only if they believe, in good faith, that fishing in the area will result in low salmon bycatch despite the closure. Additionally, Tier 1 and Tier 2 vessels entering an RHS closed area, and any vessels entering into a previously RHS closed area with little or no recent bycatch information, will first conduct a test tow prior to beginning regular fishing practices in the area. The results of the test tow will be reported to either the vessel's coop manager, other vessels in the vicinity, and/or Sea State. A test tow is defined as a tow with significantly less catch than typically caught in a full codend.**

### Section 3. Sideboard Fishery Management

The American Fisheries Act directed the North Pacific Fisheries Management Council (NPFMC) to provide regulations aimed at protecting non-AFA vessels participating in other groundfish and crab fisheries from adverse impacts that may occur due to the rationalization of Bering Sea pollock fishery. This mandate brought about the development of groundfish, crab, and prohibited species catch (PSC) sideboard limits by the NPFMC for the AFA fleet. Prior to the NPFMC Crab Rationalization Program, implemented in 2005, AFA catcher vessels eligible to participate in the Bristol Bay red king crab fishery were sideboarded to 10.96% of the general fishery guideline harvest level. However, under the Crab Rationalization program the AFA sideboards were lifted, the AFA fleet was issued quota shares, and participated in the program the same as the non-AFA crab fleet. Consequently the AFA coop reports no longer include details of their member's participation in the Bristol Bay red king crab fishery.

Vessels with less than 1,700 mt of historic catch in the BSAI pollock fishery and that meet minimum landing requirements in either the BSAI and/or GOA are granted exemptions to the BSAI cod fishery and/or GOA groundfish and PSC sideboards. Vessels in the Mothership cooperative also become exempt to BSAI cod sideboards after March 1. Exemptions to BSAI cod sideboards only apply to the directed fisheries; all AFA BSAI cod boats are subject to the PSC sideboard limits associated with the fishery.

NMFS restricts the non-exempt AFA catcher vessel fishing by an aggregate sideboard cap for each groundfish species category, and an associated PSC bycatch limit. In turn, the Intercoop Agreement manages the initial distribution, and re-distribution via intercoop transfers, of the aggregate sideboard caps and associated PSC among the nine catcher vessel coops based on their members catch history. In some cases the assigned caps are so small that, without the harvest management and monitoring provided by the Intercoop Agreement, NMFS would not open those fisheries to directed fishing by the AFA non-exempt catcher vessels. BSAI cod exempt vessels must meet PSC bycatch standards or face losing their exempt status (see section 3.a. and 3.b. of the Intercoop Agreement in Appendix 1.)

Tables covering the directed groundfish sideboard fisheries prosecuted by the AFA non-exempt vessels in 2011 are located in Appendix VI. These tables provide information on initial coop allocations of sideboard cap, the transfer of allocations between coops, the directed harvest by each coop, and the amount of sideboard cap that was remained unharvested by the AFA non-exempt fleet.

### 3.1 Groundfish Sideboards

The following tables 3.1a and 3.1b provide aggregate information regarding the allocation and harvest of BSAI and GOA sideboard species by AFA non-exempt catcher vessels. The tables report the aggregate harvest of each sideboard species taken as directed catch and as incidental catch in other directed fisheries.

**Table 3.1a** Harvest data supplied by Annual Coop Reports & Sea State, Inc.

<b>2011 BSAI AFA CATCHER VESSEL AGGREGATE GROUNDFISH SIDEBOARD CATCH</b>				
Species	Fishery	Sideboard Limit	Aggregate Catch; Directed & Non-Direct	Over / (Under) Sideboard Limit
Pacific Cod	Jig Gear	0	0	0
	Hook & Line	0	0	0
	Pot Gear	5	0	(5)
	CV < 60' H&L or Pot	2	0	(2)
	Trawl Gear CV	28,659	21,441	(7,218)
Sablefish	BS Trawl	110	0	(110)
	AI Trawl	26	0	(26)
Atka Mackerel	Eastern AI&BS	58	935	877
	Central AI	1	1	0
	Western AI	0	0	0
Yellowfin Sole	BSAI	*n/a	n/a	n/a
Rock Sole	BSAI	2,588	2,398	(190)
Greenland Turbot	BS	192	2	(190)
	AI	27	0	(27)
Arrowtooth	BSAI	1,519	790	(729)
Kamchatka Flounder	BSAI	1,038	6	(1,032)
Alaska Plaice	BSAI	600	5	(595)
Other Flatfish	BSAI	112	320	208
Flathead Sole	BS	1,874	1,701	(173)
POP	BS	485	164	(321)
	Eastern AI	39	0	(39)
	Central AI	11	0	(11)
	Western AI	0	0	0
Northern rockfish	BSAI	34	11	(23)
Shortraker	BSAI	1	0	(1)
Rougheye	EBA/EAI	1	0	(1)
	CAI/WAI	1	0	(1)
Other Rockfish	BS	2	7	5
	AI	4	1	(3)
Squid	BSAI	138	110	(28)
Skates	BSAI	759	810	51
Sharks	BSAI	2	16	14
Octopuses	BSAI	7	6	(1)
Sculpins	BSAI	239	282	43

\*no YFS sideboard limit in 2011

**Table 3.1b**

Harvest data supplied by Annual Coop Reports & Sea State, Inc.

<b>2011 GOA AFA CATCHER VESSEL AGGREGATE GROUND FISH SIDEBOARD CATCH</b>				
<b>Species</b>	<b>Fishery</b>	<b>Sideboard Limit</b>	<b>Aggregate Catch; Directed &amp; Non-Direct</b>	<b>Over / (Under) Sideboard Limit</b>
Pollock	WYK	817	129	(688)
	SEO	3,231	0	(3,231)
	610 A,B,C,&D	16,346	1,550	(14,796)
	620 A,B,C,&D	4,361	1,841	(2,520)
	630 A,B,C,&D	4,104	878	(3,226)
Pacific Cod	WGOA Inshore A&B	2,799	504	(2,295)
	WGOA Offshore A&B	234	0	(234)
	CGAO Inshore A&B	2,503	528	(1,975)
	CGOA Offshore A&B	291	0	(291)
	EGOA Inshore (annual)	14	0	(14)
	EGOA Offshore (annual)	2	0	(2)
Deep-water Flatfish	WGOA	0	0	0
	CGOA	189	10	(179)
	EGOA	27	0	(27)
Rex Sole	WGOA	1	2	1
	CGOA	242	83	(159)
	EGOA	3	0	(3)
Flathead Sole	WGOA	7	12	5
	CGOA	107	62	(45)
	EGOA	2	0	(2)
Shallow-water Flatfish	WGOA	70	5	(65)
	CGOA	763	58	(705)
	EGOA	15	0	(15)
Arrowtooth Flounder	WGOA	17	42	25
	CGOA	840	644	(196)
	EGOA	1	0	(1)
Sablefish	WGOA Trawl	0	0	0
	CGOA Trawl	61	42	(19)
	EGOA Trawl	11	0	(11)
POP	WGOA	6	6	(0)
	CGOA	776	408	(368)
	EGOA	90	0	(90)
Shortraker	WGOA	0	0	0
	CGOA	7	4	(3)
	EGOA	5	0	(5)
Rougheye	WGOA	0	0	0
	CGOA	21	4	(17)
	EGOA	5	0	(5)
Other Rockfish	WGOA	1	0	(1)
	CGOA	86	0	(86)
	EGOA	0	0	0

**Table 3.1b continued**

<b>2010 GOA AFA CATCHER VESSEL AGGREGATE GROUND FISH SIDEBOARD CATCH</b>				
Northern Rockfish	WGOA	1	0	(1)
	CGOA	63	52	(11)
Pelagic Shelf Rockfish	WGOA	0	0	0
	CGOA	0	28	28
	EGOA	3	0	(3)
Thornyhead Rockfish	WGOA	12	0	(12)
	CGOA	18	8	(10)
	EGOA	20	0	(20)
Big Skates	WGOA	4	0	(4)
	CGOA	13	31	18
	EGOA	4	0	(4)
Longnose Skates	WGOA	1	0	(1)
	CGOA	13	7	(6)
	EGOA	5	0	(5)
Other Skates	Gulfwide	13	4	(9)
DSR	CGOA	1	0	(1)
Atka Mackerel	Gulfwide	62	0	(62)
Squids	Gulfwide	7	4	(3)
Sharks	Gulfwide	39	2	(37)
Octopuses	Gulfwide	6	0	(6)
Sculpins	Gulfwide	35	8	(27)

The aggregate sideboard harvest tables report overages in several species not directly fished by the AFA non-exempt vessels. The overages occurred in species taken as incidental catch in directed fisheries such as Bering Sea pollock and BSAI cod. While the coops have successfully managed the directed fisheries' sideboard limits, the incidental catch of species associated with those directed fisheries varies from season to season and from year to year. Because the sideboard limits are based on a three-year average it should be expected that the sideboard caps of species taken as incidental catch, rather than directed catch, would at times be exceeded. Additionally, rises in species abundance and changes in location may be different now than during the 3 year snapshot of the AFA sideboard years causing increases in the incidental catch of some species.

Finally, overages in the GOA rockfish species are the result of transfers allowed by the Rockfish Pilot Program. Further details are covered in that program's report.

### 3.2 PSC Catch

Tables 3.2a, 3.2b, and 3.2c cover prohibited species bycatch amounts taken by AFA catcher vessels participating in BSAI and GOA groundfish fisheries. Due to reductions in the halibut cap as a result of Amendment 80, the halibut sideboard exceeds the total halibut now available to non-Amendment 80 trawl fleets. Therefore the halibut sideboard cap no longer applies. However, the catcher vessel coops continue to allocate halibut PSC limits to each of the catcher vessel cooperatives in an effort to minimize halibut bycatch.

**Table 3.2a** Data supplied by SeaState and Annual Coop Reports

<b>2011 BSAI AFA CATCHER VESSEL AGGREGATE PSC SIDEBOARD CATCH</b>				
PSC Species	Target Fishery	Sideboard Limit	Aggregate PSC Mortality	Over / (Under) Sideboard Limit
Halibut - No longer a Sideboard limit; now fishery limit	Pacific Cod, Trawl	887	157	(730)
	Yellowfin Sole	101	0	(101)
	Pollock/A.Mack/O.Species	5	98	93
Red King Crab, Zone 1	All AFA CV BSAI Fisheries (except pollock)	52,600	0	(52,600)
C.Opilio, COBLZ	All AFA CV BSAI Fisheries (except pollock)	1,246,771	1,863	(1,244,908)
C.Bairdi, Zone 1	All AFA CV BSAI Fisheries (except pollock)	244,593	4,249	(240,344)
C.Bairdi, Zone 2	All AFA CV BSAI Fisheries (except pollock)	418,567	combined with zone 1 data	n/a

**Table 3.2b**

Data supplied by Sea State

<b>2011 GOA NON-EXEMPT AFA CATCHER VESSEL PSC SIDEBOARD CATCH</b>				
<b>PSC Species</b>	<b>Target Fishery</b>	<b>Sideboard Limit</b>	<b>Aggregate PSC Catch</b>	<b>Over / (Under) Sideboard Limit</b>
Halibut (mortality in metric tons)	Trawl, 1st Season Allowance			
	Shallow water Targets	153	13	(140)
	Deep water Targets	7	0	(7)
	Trawl, 2nd Season Allowance			
	Shallow water Targets	34	6	(34)
	Deep water Targets	21	3	(18)
	Trawl, 3rd Season Allowance			
	Shallow water Targets	68	0	(68)
	Deep water Targets	28	0	(28)
	Trawl, 4th Season Allowance			
	Shallow water Targets	51	16	(35)
	Deep water Targets	0	1	
	Trawl, 5th Season Allowance			
	All Targets	62	4	(58)
	Shallow water Targets	Pollock, cod, shallow-water flatfish, flathead sole, atka mackerel, and "other species".		
Deep water Targets	Sablefish, rockfish, deep-water flatfish, rex sole, and arrowtooth flounder.			

**Table 3.2c**

Data supplied by AFA CV Reports

<b>2011 BSAI AFA CATCHER VESSEL HERRING BYCATCH</b>		
<b>PSC Species</b>	<b>Target Fishery</b>	<b>Aggregate Bycatch</b>
Herring	Pollock	305



## **Appendix I**

### **2011 AFA Catcher Vessel Intercooperative Agreement**

## 2011 INTERCOOPERATIVE AGREEMENT

This 2011 INTERCOOPERATIVE AGREEMENT is entered into by and among HIGH SEAS CATCHERS COOPERATIVE (“High Seas”), MOTHERSHIP FLEET COOPERATIVE (“MFC”) and the “Inshore Coops”, i.e., AKUTAN CATCHER VESSEL ASSOCIATION, NORTHERN VICTOR FLEET COOPERATIVE, PETER PAN FLEET COOPERATIVE, UNALASKA FLEET COOPERATIVE, UNISEA FLEET COOPERATIVE and WESTWARD FLEET COOPERATIVE, all of which are Washington Fish Marketing Act corporations, as of \_\_\_\_\_, 2011, with respect to the following facts:

A. High Seas, MFC, and the Inshore Coops (together, the “Coops”) are composed of certain catcher vessels (the “Vessels”) eligible to harvest Bering Sea (“BS”) pollock under the American Fisheries Act (the “AFA”). High Seas and the MFC are composed of all of the catcher vessels eligible to harvest BS and AI pollock in the “catcher/processor” and “mothership” sectors of such fisheries, respectively. The Inshore Coops have each received an allocation of BS pollock in accordance with Section 210 of the AFA. The members of each of the Coops have allocated among themselves the pollock available to their respective Coop, and have agreed that an over-harvest of its allocation by any member shall subject such member to a penalty.

B. The North Pacific Fishery Management Council (the “Council”) has adopted “trigger amounts” of non-Chinook salmon and herring (the “Trigger Amounts”). Attainment of a Trigger Amount causes certain “savings areas” to be closed to trawling for pollock for certain periods of time. The Coops are also subject to limits on their incidental catch of Chinook salmon, halibut, and crab (the “PSC Limits”). Each Coop’s members have agreed to exercise their best efforts to conduct their fishing efforts such that their Coop operates within the Trigger Amounts and PSC Limits, and to comply with the related management measures.

C. Pursuant to Section 211(c) of the AFA, the Council has adopted certain measures to prevent the Vessels from exceeding in the aggregate their traditional harvest levels in certain fisheries other than BS pollock (the “Sideboards”). The members of each of the Coops have allocated the Sideboards limits among themselves, and have agreed that an over-harvest of a Sideboard limit by any member shall subject that member to a penalty.

D. The Coops are subject to certain time and area limits on their harvest of BS pollock in connection with Steller sea lion protection measures (the “RPAs”).

Now, therefore, the parties agree as follows:

1. Trigger Amount Management. The Coops agree to exercise all reasonable efforts to reduce their salmon and herring bycatch to the lowest commercially practical levels, and specifically agree to coordinate their members' fishing activities with the goal of achieving the lowest practicable bycatch rates. For purposes of this Section, Coop catch data produced by the Monitoring Agent (as identified in Section 6.a, below) in conformance with NMFS catch accounting and bycatch estimation procedures shall be presumed accurate.

a. Bycatch Reporting. Each Coop shall arrange to have each of their members' Vessels' bycatch data (to the fullest extent available, with tow-by-tow data being considered optimal) released directly from the NMFS Observer Program to the Monitoring Agent and the Intercoop Manager (as identified in Section 8, below). The Monitoring Agent and the Intercoop Manager are hereby authorized to release all such data in forms and to parties as they reasonably deem appropriate to promote bycatch reduction.

2. Sideboard Limits. Subject to applicable Sideboard exemptions (including the "1700 metric ton" BS/AI cod and Gulf of Alaska ("Gulf") groundfish Sideboard exemptions and the mothership sector BS/AI cod sideboard exemption), the Coops agree to limit their collective members' Vessels' aggregate annual harvest of each Sideboard species to the amount that the Coop members' Vessels' collective catch histories contribute to the annual Sideboard for such species, as calculated by the National Marine Fisheries Service ("NMFS") in accordance with 50 C.F.R. § 679.64(b). To give effect to this provision, each Coop shall (i) limit its non-exempt members' Vessels' aggregate annual harvest of each Sideboard species to the amount that such Vessels contribute to the aggregate annual Sideboard for such species; or (ii) in the case of two or more Coops entering into an intercooperative agreement under which the parties have agreed to limit their collective non-exempt members' Vessels' aggregate annual harvest of one or more Sideboard species to the amount that such Coops' members' Vessels' collective catch histories contribute to the annual Sideboard for such species, limit its members catch in compliance with such intercooperative agreement.

3. Sideboard Management. The Coops acknowledge and agree that coordinated Sideboard management is essential to insure compliance with the aggregate Sideboard limits established under the AFA. Therefore, the Coops agree to the procedures set forth in this Section 3. For purposes of this Section, Coop catch data produced by the Monitoring Agent in conformance with NMFS catch accounting and bycatch estimation procedures shall be presumed accurate. Vessels having made an observed trip may expedite the accounting of that trip's tow-by-tow data by directly submitting copies of the following NMFS forms, as filled out by the Observer, to the Monitoring Agent: Vessel Haul Form, Observer Haul Form, and Species Composition Form.

a. Sideboard and Sideboard-Related PSC Cap Allocation. The Monitoring Agent will annually allocate the BS/AI Pacific cod Sideboard (the "Cod

Sideboard”) in accordance with the terms and conditions of that certain Cod Allocation Agreement among the Coops dated as of June 1, 2000 (the “Cod Agreement”). The Monitoring Agent, in consultation with NMFS, will allocate all Sideboard species other than BS/AI Pacific cod and will allocate all PSC Caps (including those applicable to BS/AI Pacific cod) in accordance with this Section 3.a.

The Monitoring Agent will first reserve an amount of each such Sideboard species necessary to fund the bycatch needs of pollock and other directed groundfish fisheries in which the AFA catcher vessels participate. Then, the Monitoring Agent will initially allocate the BS, AI and Gulf non-exempt vessel Sideboard directed fishery allowances, exempt vessel Sideboard reserves and PSC Limits among the Coops as set forth herein. The allocations will be based on NMFS data and formulas to the extent feasible, and on the best available data otherwise. Each Coop agrees to exercise its best efforts to provide the Monitoring Agent with all catch data that the Monitoring Agent reasonably requests for purposes of calculating such allocations. Upon the Monitoring Agent having allocated the non-exempt and exempt vessel Sideboard allowances among the Coops, the Monitoring agent shall allocate the PSC Limits such that:

(i) each Coop shall receive PSC Limit allocations for each of the Sideboard fisheries in which its vessels operate without exemptions proportionate such Coop’s related Sideboard species allocations, provided that each Coop’s initial PSC Limit allocations related to non-exempt vessel BS/AI cod harvest shall be reduced by five percent (5%) to fund the “traditional time and area” buffer (the “Buffer”) provided to the exempt vessels pursuant to (ii), below; and

(ii) each Coop shall receive separate PSC Limit allocations for each of the fisheries in which one or more of its vessels operate on an exempt basis, proportionate to such vessels’ contribution to the related NMFS reserve, provided that each Coop’s initial “1700 mt” exempt vessel BS/AI cod PSC allocation shall be adjusted upward by a pro rata amount of the Buffer. In cases where an exempt vessel contributes less than 500 metric tons (“mt”) to the BS/AI cod exempt vessel reserve, the initial allocation of PSC relative to that vessel shall be based on a presumed contribution of 500 mt.

For purposes of this Section 3, the mothership sector catcher vessels shall be considered “non-exempt” prior to March 1, and their initial coop Sideboard and PSC Limit allocations shall be made accordingly. The mothership catcher vessels shall become “exempt” as of March 1, and thereupon shall become eligible for a reallocation of PSC pursuant to Subsection b., below, if as a coop group they have harvested their initial BS/AI cod Sideboard allocation without exceeding their initial allocation of PSC.

b. BS/AI and Gulf Cod PSC Reallocation. The Monitoring Agent will track the aggregate BS/AI and Gulf cod catch and halibut and crab bycatch of each Coop’s exempt vessels. Upon the Monitoring Agent determining that a Coop’s exempt vessels (as a group) have harvested their initial or subsequent allocation(s) of cod in the

BS/AI or Gulf cod fishery without exceeding the Coop's related allocation of exempt vessel PSC (as adjusted by intra or inter Coop transfers) (such Coop being a "Complying Coop"), the Monitoring Agent will reduce each Coop's (including the Complying Coop's) remaining allocation of cod-related PSC for such cod fishery (if any) pro rata, according to the proportion of its initial non-exempt allocation of such PSC vis-a-vis the other Coops, such that the sum of the reductions is the lesser of (i) the amount of PSC necessary for each exempt vessel in the Complying Coop to harvest an additional 300 mt of cod at the pre-Buffer non-exempt cod/PSC ratio, or (ii) the proportionate amounts of such PSC that the Monitoring Agent deems necessary for the Complying Coop's exempt vessels to operate at such ratio until such fishery is closed to catcher vessel trawling; provided that the sum of such reductions under (i) or (ii) above shall in no case exceed that amount of PSC calculated to harvest 1500 mt at the pre-Buffer non-exempt cod/PSC ratio. The Monitoring Agent will then increase the relevant Coop's exempt vessel cod-related PSC allocations for such fishery by the sum of such reductions. On the other hand, if a Coop's exempt vessels harvest their initial or subsequent cod-related PSC allocation for the BS/AI or Gulf cod fishery (as adjusted by inter or intra Coop transfers) before having harvested the Coop's cod allocations made available therewith, the Monitoring Agent will not increase such Coop's exempt vessel allocations, and such Coop shall require such vessels to cease their directed fishing in that cod fishery, notwithstanding their exemption. If the Monitoring Agent determines that a PSC reallocation under this Section has provided a Coop with PSC in excess of the amount necessary to fish until fishery closure, the Monitoring Agent will have the authority to release an amount of the surplus that the Monitoring Agent deems reasonable back to the contributing Coops.

c. BS/AI Cod Harvest Timing. To facilitate harvest of the full amount of the BS/AI cod Sideboard, each Coop agrees to manage its non-exempt vessels' BS/AI cod directed fishing harvest such that no more than sixty percent (60%) of the related initial PSC allocation is harvested prior to March 1.

d. Optimal PSC Utilization. Each Coop agrees to exercise its best efforts to manage its vessels such that their aggregate PSC catch (as determined by the Monitoring Agent in accordance with NMFS procedures) does not exceed the Coop's PSC Limit allocations, as adjusted by transfers with other Coops and pursuant to Subsection 3.b., above. Each Coop agrees to release to the Monitoring Agent on a timely basis for redistribution at no cost the PSC it determines is not necessary to harvest its Sideboard allocations.

e. Gulf of Alaska Groundfish Sideboard Exemption.

(i) The Coops acknowledge that the Council has stipulated that no Vessel shall be exempt from the Gulf of Alaska groundfish Sideboards in any year during which other vessels are permitted to lease any portion of such Vessel's BS or AI pollock allocations. The Coops acknowledge that the Council's stipulation was intended to prevent a Vessel from using its ability to transfer or license its Coop BS or AI pollock

allocation to increase its opportunity to harvest Gulf groundfish in excess of applicable Sideboards. The Coops agree to require that an exempt Vessel that actually exceeds an otherwise applicable Gulf groundfish Sideboard in 2011 shall not have transferred any amount of such Vessel's BS/AI pollock allocation for 2011 to another vessel such that the aggregate amount of such exempt Vessel's annual BS/AI pollock allocation is reduced by such transfer(s). The Coops agree that an exempt Vessel which actually exceeds a Gulf groundfish Sideboard and fails to comply with the BS/AI pollock transfer limitations of this Section shall be deemed to have over-harvested its Sideboard allocation, notwithstanding its exempt status, and shall be subject to the related over-harvest penalties per the enforcement provisions of its Coop's Membership Agreement and this Agreement. For purposes of this provision, a Vessel's pollock allocations shall be calculated net of the amount normally reserved for harvest by a Coop "sweep-up" Vessel for purposes of season and/or area harvest limit compliance.

(ii) The Coops agree that while AFA vessels exempt from Gulf of Alaska Sideboards are restricted as described in Section 3.e.(i), above, the Council, through Congressional direction, has implemented the Gulf of Alaska Rockfish Pilot Program (RPP) which recognized a different set of years to define each vessel's historic participation in the Gulf of Alaska rockfish fisheries than the AFA Sideboard years of 1995, 1996, and 1997. Therefore, for purposes of this section, an AFA Gulf exempt Vessel's rockfish Sideboard limits will be equal to their initial RPP allocations.

#### 4. Over-harvest Prevention Measures.

a. Harvest Limits. The Coops agree to exercise their best efforts to prevent any of their members from exceeding their pollock allocation and Sideboard limits. In cases where a member has done so, the Coops agree to exercise their best efforts to prevent such over-harvest from affecting non-members and/or resulting in a violation of fishery regulations. To that end, the Coops agree to facilitate pollock allocation and Sideboard limit transfers among members when practicable, agree to transfer PSC Limit apportionments among Coops when practicable, and to issue "stop fishing" orders as appropriate when such transfers are not practicable. The Coops also agree to encourage their members to mitigate the effects of inadvertent over-harvests by making directed fishing and PSC Limit allocations available to other Coop members on reasonable terms and conditions. However, other than as provided in Section 4.f.(ii), below, nothing in this Section 4 shall constitute an affirmative obligation on the part of any Coop or its members to transfer an allocation at the request of another Coop or other members.

b. Pollock Allocation and Sideboard Penalties. The Coops acknowledge that notwithstanding the provisions of Section 4.a, above, adopting and enforcing appropriate penalties is necessary to create over-harvest disincentives. The Inshore Coops therefore each agree to adopt the uniform penalty for an Inshore Coop member exceeding its BS, AI or Gulf pollock directed fishing allocation amount or area or season proportion of one hundred fifty percent (150%) of the total ex-vessel value of such over-harvest. For purposes of this Subsection 4.b and Subsection 4.c, below,

provision, ex-vessel value shall be deemed to be the ex-vessel price paid by the processor(s) to which the over-harvesting member delivered for the over-harvested species during the season(s) in which the over-harvest takes place, and shall include all consideration paid for the over-harvested allocation, including but not limited to all bonuses and post season adjustments. The Coops each agree to adopt the uniform penalty amount of One Thousand Dollars (\$1,000.00) per metric ton for over-harvests in the directed BS, AI and Gulf Pacific cod fisheries, and the amount of Three Hundred Dollars (\$300.00) per metric ton for over-harvests in all other BS, AI and Gulf directed groundfish fisheries. Over-harvests shall be determined on the basis of the best available data. Harvest reports developed by the Monitoring Agent shall be presumed accurate in the absence of demonstrable error.

c. PSC Limit Enforcement. Upon a Coop receiving written notice from the Monitoring Agent that it does not have an adequate PSC Limit allocation to support further fishing activity by its members' vessels, such Coop shall immediately cause its members' vessels to cease fishing in the relevant directed fisheries. The Coops hereby adopt as a uniform penalty for each landing following such notice that includes a PSC species harvested in excess of a Coop's PSC Limit allocation an amount equal to twice the ex-vessel value of all commercially harvestable species delivered in such landing. For purposes of this Subsection, Coop catch data produced by the Monitoring Agent in conformance with NMFS catch accounting and bycatch estimation procedures will be presumed accurate. The Coops agree to take all actions and execute all documents reasonably necessary to give effect to this provision.

d. Liquidated Damages. The Coops acknowledge that the financial impact associated with over-harvesting an allocation or exceeding a Sideboard limit or PSC Limit are difficult to estimate, and that penalty amounts are therefore intended to be a substitute in all cases for direct, indirect and consequential damages. Therefore, the Coops agree that the penalty amounts established under 4.b. and 4.c., above are liquidated damages, the payment of which (together with reasonable costs of collection) shall satisfy a member's obligation with respect to any harvest in excess of an allocation, Sideboard or applicable PSC Cap. The Coops hereby waive any and all claims to direct, indirect or consequential damages related to such over-harvest.

e. Rights of Action. Each Coop agrees that the members of all other Coops shall have rights to initiate penalty actions and to be paid overharvest forfeitures and related costs of collection equivalent to such Coop's own members' rights. Each Coop agrees to take all corporate action necessary to give effect to this provision.

f. Indemnification.

(i) Each Coop (an "Indemnifying Coop") hereby agrees to indemnify, defend and hold harmless all other Coops and their members (the "Indemnitees") against all third party claims, legal actions and proceedings of any type

whatsoever (the "Actions"), and against all third party damages, including but not limited to all liabilities, obligations, judgments, penalties, fines, forfeitures, costs of defense and reasonable attorneys' fees (including fees incurred enforcing this indemnification) (together, the "Damages") that the Indemnitees incur as a result of an overharvest of a pollock allocation, Sideboard species or PSC Limit by a member of the Indemnifying Coop.

(ii) For purposes of this provision, in cases where an over-harvest by a member is (a) not willful or repeated; (b) is capable of being corrected by other members (of the same or other Coops) restraining their harvest(s), and timely written notice is provided to such members' Coop(s); and (c) for which the appropriate amount of liquidated damages is tendered by the originally over-harvesting member to a qualified third party escrow agent in readily available funds, the obligation of indemnification for third party claims related to the original over-harvest shall shift to the Coop(s) receiving notice and the tender of liquidated damages.

#### 5. Steller Sea Lion-Related Management Measures.

a. Non-Exempt Vessels. Other than as necessary to give effect to exemptions for which its members qualify, each Inshore Coop agrees to limit the aggregate annual pollock harvest of its members per season and per area (as determined in accordance with NMFS accounting procedures related to such harvests) to the percentage of the annual inshore pollock directed fishing allowance generally permitted to be harvested during such season and/or in such area.

b. SCA Exemption for Vessels Equal to or Less than 99' in Overall Length. The Coops acknowledge that under the current Steller sea lion-related management measures, vessels equal to or less than 99 feet in length are eligible to harvest all of their BS pollock A season allocations inside the SCA. So long as this exemption remains in effect, the Coops agree that the Monitoring Agent in consultation with NMFS will calculate and reserve from the Coops' aggregate pollock allocations an amount of quota inside the SCA adequate to fund the total seasonal directed harvest of all members' Vessels equal to or less than 99 feet (the "99' Reserve"). The Monitoring Agent will then allocate the 99' Reserve among the Coops pro rata, according to the relative catch histories of their vessels under 99'. Each Coop shall in turn allocate its share of the 99' Reserve among its members operating vessels under 99' in length, prior to establishing the inside SCA allocations for its members' Vessels over 99' in length. The Coops agree to require that any license or transfer of pollock quota from a vessel equal to or less than 99' to a vessel over 99' shall be subject to generally applicable regulations concerning spatial and temporal distribution of catch, including but not limited to proportions which may be harvested inside the SCA, notwithstanding the exemption extended to vessels less than or equal to 99'.

#### 6. Data Reporting.



a. Appointment of Monitoring Agent. The Coops acknowledge that it will not be possible to obtain the benefits associated with cooperative harvesting activity unless catch data is reported on a timely basis to a centralized monitoring and reporting agent (the "Monitoring Agent"). The Coops agree to independently contract with Sea State, Inc. as their agent for that purpose.

b. Data Gathering. Each Coop agrees to take all commercially reasonable actions to obtain catch data and other information that may be necessary for effective fishery management from its members as soon as reasonably possible, and to provide such data to the Monitoring Agent as soon as reasonably possible after receiving such data. Data produced for the Coops by the Monitoring Agent shall be presumed accurate, which presumption shall only be rebuttable upon clearly demonstrating inaccuracy.

7. Vessel Pre-registration. The Coops acknowledge that it may be necessary for their members to provide advance notice of their intent to employ Vessels in certain fisheries, to provide NMFS and the Coops with the ability to project catch rates and amounts. Each Coop agrees to obtain such elections from its members and report them to the Monitoring Agent on a timely basis.

8. Intercooperative Management. The Coops acknowledge that resolving issues related to cooperative harvesting operations will be a continuing process. Each Coop agrees to appoint a person to represent it in intercooperative matters. The Coops further agree to retain United Catcher Boats ("UCB") to provide ongoing intercooperative coordination services and an intercooperative manager (the "Intercoop Manager") through December 31, 2011. The Coops agree such services shall not include representing the Coops or any of them in political or general policy matters, other than as authorized by all Coops in advance.

9. Term. This Agreement shall take effect upon execution by all of the Coops. This Agreement shall expire on November 30, 2011. The Coops agree to meet in good faith negotiations concerning modification of this Agreement and extension of its term not later than October 1, 2011, with the express intent of replacing or extending this Agreement prior to November 30, 2011.

10. Miscellaneous.

a. No amendment to this Agreement shall be effective against a party hereto unless in writing and duly executed by such party. The parties agree to amend this Agreement as reasonably necessary to comply with changes in law, and policies and regulations implementing the American Fisheries Act.

b. This Agreement shall be governed by and construed in accordance with applicable federal law and the laws of the State of Washington.

c. This Agreement may be executed in counterparts which, when taken together, shall have the same effect as a fully executed original. Delivery of a signed copy of this Agreement by telefacsimile shall have the same effect as delivering a signed original.

d. The parties agree to execute any documents necessary or convenient to give effect to intents and purposes of this Agreement.

e. All notices required to be given under this Agreement shall be deemed given five (5) days following deposit in certified first class U.S. mail, postage prepaid, with the correct address, or upon the first business day following confirmed telefacsimile transmission to the recipient. Each Coop agrees to provide the name, postal address, telefacsimile number and e-mail address (if any) of its representative for purposes of receiving notices under this Agreement within three (3) days of executing this Agreement.

f. In the event that any provision of this Agreement is held to be invalid or unenforceable, such provision shall be deemed to be severed from this Agreement, and such holding shall not affect in any respect whatsoever the validity of the remainder of this Agreement.

g. Each Coop agrees to use its best efforts to resolve any disputes arising under this Agreement through direct negotiations. Other than disputes related to overharvest of pollock, Sideboard limits or PSC Limits in connection with which one or more Coops or their members seek an injunction, a restraining order or some other form of equitable relief, all disputes not resolved through direct negotiation and/or dispute resolution will be submitted to arbitration in Seattle, Washington upon the request of any party to this Agreement. The party's written request will include the name of the arbitrator selected by the party requesting arbitration. The other party will have ten (10) days to provide written notice of the name of the arbitrator it has selected, if any. If the other party timely selects a second arbitrator, the two arbitrators will select a third arbitrator within ten (10) days. If the other party does not timely select the second arbitrator, there shall be only the one arbitrator. The single arbitrator or the three (3) arbitrators so selected will schedule the arbitration hearing as soon as possible thereafter. Every arbitrator, however chosen, must have no material ties to any Coop or Coop member. The decision of the arbitrator (or in the case of a three (3) arbitrator panel, the decision of the majority) will be final and binding. The arbitration will be conducted under the rules of (but not by) the American Arbitration Association. The parties will be entitled to limited discovery as determined by the arbitrator(s) in its or their sole discretion. The arbitrator(s) will also determine the "prevailing party" and that party will be entitled to its reasonable costs, fees and expenses, including attorneys' and arbitrator fees, incurred in the action by said party. In no event will arbitration be available pursuant to this paragraph after the date when commencement of such legal or equitable proceedings based on such claim, dispute, or other matter in question would be barred by the applicable statute of limitations.

## **Appendix II**

### **Chinook Conservation Area Agreement**

## CHINOOK SALMON CONSERVATION AREA AGREEMENT

This CHINOOK SALMON CONSERVATION AREA AGREEMENT is entered into by and among POLLOCK CONSERVATION COOPERATIVE (“PCC”), the HIGH SEAS CATCHERS COOPERATIVE (“High Seas”), MOTHERSHIP FLEET COOPERATIVE (“MFC”), the “Inshore Coops”, i.e., AKUTAN CATCHER VESSEL ASSOCIATION, ARCTIC ENTERPRISE ASSOCIATION, NORTHERN VICTOR FLEET COOPERATIVE, PETER PAN FLEET COOPERATIVE, UNALASKA FLEET COOPERATIVE, UNISEA FLEET COOPERATIVE and WESTWARD FLEET COOPERATIVE, and SEA STATE, INC. (“Sea State”) and UNITED CATCHER BOATS ASSOCIATION (“UCB”) as of \_\_\_\_\_, 2008. PCC, High Seas, MFC and the Inshore Coops are hereafter collectively referred to as the “Coops”. This Agreement is entered into with respect to the following facts:

### RECITALS

The Coops are parties to that certain Amended and Restated Bering Sea Pollock Fishery Rolling Hot Spot Closure Salmon Bycatch Management Agreement dated December 1, 2007 (the “Salmon Bycatch Agreement”). The Coops believe that the effectiveness of the Salmon Bycatch Agreement may be enhanced by closing a certain area of the Bering Sea to pollock fishing by Coop member vessels during the Bering Sea pollock “A” season unless and until a determination is made that salmon bycatch rates within such closed area are not problematic.

Now, therefore, the parties agree as follows:

### AGREEMENT

1. Purpose of Agreement. The purpose of this Agreement is to implement a Chinook salmon conservation area closure that enhances the effectiveness of the Salmon Bycatch Agreement. Each party to this Agreement agrees exercise all commercially reasonable efforts to achieve that purpose.

2. Monitoring and Management. The Coops shall retain Sea State to provide the data gathering, analysis, fleet monitoring and reporting services necessary to implement the Chinook salmon conservation area closure contemplated under this Agreement. The Coops shall retain UCB to provide day-to-day management of inter-cooperative matters related to the performance of this Agreement.

3. Definitions. All capitalized terms not otherwise defined in this Agreement shall have the meaning given to them in the Salmon Bycatch Agreement.

4. Chinook Salmon Conservation Area Closure. The area described on the attached Exhibit A (the “Chinook Conservation Area”) shall be closed to all pollock fishing by Coop member vessels, including but not limited to fishing for Community Development Quota pollock, from the opening of each Bering Sea pollock fishery “A” season until the earlier of (i) such time as Sea State authorizes pollock fishing to take place in the Chinook Conservation Area in accordance with this Agreement, and then only on the terms and conditions established by Sea State, or (ii) closure of the Bering Sea pollock fishery “A” season.

a. If Sea State determines in its sole discretion that it is reasonable to conduct test fishing within the Chinook Conservation Area, Sea State may establish a protocol under which Coop member vessels may conduct pollock fishing operations in such Area. The terms and conditions of such protocol shall have the same force and effect as the Chinook Conservation Area closure implemented under this Agreement, any violation of such terms shall constitute a breach of this Agreement, and the terms of Section 5, below shall apply to any violation of terms and conditions of such protocol.

b. If based on the results of test fishing activity within the Chinook Conservation Area Sea State determines in its sole discretion that Chinook salmon bycatch rates in the directed pollock fishery could be reduced by permitting pollock fishing to take place within the Chinook Conservation Area, Sea State may open the Chinook Conservation Area to pollock fishing, subject to the restrictions imposed under the Salmon Bycatch Agreement and any additional terms and conditions as Sea State may impose in its sole discretion.

5. Chinook Conservation Area Enforcement.

a. Sea State shall monitor the fishing activities of all Coops’ members’ vessels, and shall promptly report all apparent Chinook Conservation Area violations to all Coops. For purposes of this Agreement, “fishing” shall mean all activity of a vessel between the time of initial gear deployment and final gear retrieval. For purposes of this Section 5.a., “gear deployment” and “gear retrieval” shall have the meanings given them in 50 C.F.R. 679.2 or its successor, as the same may be amended from time to time. Initial gear deployment shall mean setting trawl gear with an empty codend, and final gear retrieval shall mean retrieving trawl gear to either pull a codend aboard the vessel or to deliver the codend to another vessel.

b. Upon receiving notice of an apparent violation from Sea State, the Board of Directors of the Coop to which the vessel belongs shall have one hundred and eighty (180) days to take action in connection with the apparent violation, and to provide a report of the action taken and a copy of the record supporting that action to all other Coops. When the Board of Directors of the Coop to which the vessel belongs provides

its report, or if the Coop Board of Directors fails to provide its report within such 180 day period, then Sea State and/or UCB shall distribute the Coop's report (if provided) and the record developed by Sea State in connection with the apparent violation to all other Coops, and each Coop shall have standing to pursue Chinook Conservation Area enforcement actions equivalent to such Coop's own rights with respect to its members.

c. The Coops hereby adopt a uniform assessment for a skipper's first annual violation of a Chinook Conservation Area closure of Ten Thousand Dollars (\$10,000.00), a uniform assessment for a skipper's second annual violation of a Chinook Conservation Area closure of Fifteen Thousand Dollars (\$15,000.00), and a uniform assessment of Twenty Thousand Dollars (\$20,000.00) for a skipper's third and subsequent annual violations. The Coops acknowledge that the damages resulting from violating a Chinook Conservation Area closure are difficult to estimate, and that the foregoing assessment amounts are therefore intended to be a substitute in all cases for direct, indirect and consequential damages. Therefore, the Coops agree that the assessment amounts established under this Subsection 5.c are liquidated damages, the payment of which (together with reasonable costs of collection) shall satisfy a Coop's and its members' obligations related to a Chinook Conservation Area closure violation. The Coops hereby waive any and all claims to direct, indirect or consequential damages related to such violation.

d. The Coops agree that any funds collected in connection with a violation of this agreement, in excess of those necessary to reimburse the prevailing party for its costs and attorneys fees, shall be used to support research concerning the stocks of origin of salmon taken incidentally in the Bering Sea pollock fishery.

e. For purposes of this Section 5, State and Federal landing reports, observer data, VMS tracking data, vessel log books and plotter data and Coop catch data produced by the Sea State in conformance with NMFS catch accounting and bycatch estimation procedures shall be presumed accurate and sufficient for determining whether a vessel violated a Chinook Conservation Area closure, absent a clear and compelling demonstration of manifest error. The Coops agree to take all actions and execute all documents necessary to give effect to this provision.

f. The Coops agree to require their members to obtain and maintain an operational VMS unit approved by Sea State on their vessels, provided that such units are available on a commercially reasonable basis. The Coops agree to cause their members to release their VMS tracking data to Sea State. Sea State agrees not to disclose any such information, other than as specifically authorized under this Agreement, as necessary to fulfill the intents and purposes of this Agreement, or with prior consent from the affected vessel owner. The Coops agree that the damages resulting from vessels operating in non-compliance with this subsection are difficult to estimate, and the Coops therefore hereby adopt a uniform assessment of One Thousand Dollars (\$1,000.00) per day for each consecutive day over thirty (30) consecutive days that a Coop member's vessel is

employed in the Fishery without an operational VMS unit approved by Sea State, provided such unit is available on a commercially reasonable basis.

**6. Release and Waiver of All Claims Against Sea State and United Catcher Boats; Indemnification and Hold Harmless.** The parties acknowledge that the effectiveness of this Agreement depends to a significant extent on Sea State's and UCB's discretion and judgment. The parties further acknowledge that if Sea State or UCB were potentially liable for simple negligence in connection with such actions, it would be necessary for Sea State and UCB to charge a substantially larger fee for the services they provide in connection with this Agreement, to offset that potential liability. It is therefore in the parties' interest to reduce Sea State's and UCB's potential liability under this Agreement. Therefore, the Coops hereby waive and release any and all claims against Sea State and UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB. Further, the Coops jointly and severally agree to indemnify, defend and hold Sea State and UCB harmless against any third party claims asserted against Sea State or UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB.

**7. Coop Membership Agreement Amendments.** To give effect to this Agreement, the Coops agree to cause each of their Membership Agreements to be amended to include the following provisions.

- a. Each Coop member shall acknowledge that its vessel's operations are governed by this Agreement, and shall agree to comply with its terms.
- b. Each Coop member shall authorize its Coop's Board of Directors to take all actions and execute all documents necessary to give effect to this Agreement.
- c. Each Coop member shall authorize its Coop Board of Directors to enforce this Agreement, and each member shall authorize the other Coops to individually or collectively enforce this Agreement upon the passage of one hundred eighty (180) days from the date such Board receives notice from Sea State that a Coop member may have failed to comply with the Agreement.
- d. Each Coop member shall release to Sea State its State and Federal landing reports, observer data, VMS tracking data, and vessel log books and plotter data for purposes of determining its compliance with this Agreement, and agrees that in the event Sea State concludes that its vessel may have violated a Chinook Conservation Area closure, Sea State may release such data as Sea State in its sole discretion determines appropriate to facilitate enforcement of this Agreement.

e. Each Coop member shall agree that the information contained in the records identified in d., above, shall be presumed accurate absent a clear and compelling demonstration of manifest error, and shall be presumed sufficient to determine its compliance with this Agreement.

f. Each Coop member shall agree that the damages resulting from violating a Chinook Conservation Area closure are difficult to estimate, and that the assessment amounts provided under this Agreement are therefore intended to be a substitute in all cases for direct, indirect and consequential damages. Each Coop member shall agree that its Coop Board of Directors may modify Chinook Conservation Area violation assessment amounts from time to time, as necessary to maintain an effective deterrent to Chinook Conservation Area violations. Each Coop member shall agree that each trawl tow during which the member's vessel fishes in a Chinook Conservation Area in violation of this Agreement shall constitute a separate violation for purposes of assessment calculation. Each Coop member shall agree that damages for violating this Agreement shall apply on a strict liability basis, regardless of a member's lack of knowledge of the violation or intent to violate the agreement. Each Coop member shall agree that actual damages for violating this Agreement would be difficult to calculate, and shall therefore agree to pay the assessment amounts established under this Agreement, as amended from time to time, as liquidated damages. Each Coop member shall agree to modify its skipper contracts to make its skipper(s) fully responsible for the assessments levied in connection with a breach of the agreement. Further, each Coop member shall agree that in the event a skipper fails to assume such assignment of liability, or in the event such assumption of liability is deemed invalid, the member shall be liable for the full amount of such assessment, and all related costs and attorneys' fees.

g. Each Coop member shall agree that in connection with any action taken to enforce this Agreement, the prevailing party shall be entitled to the costs and fees it incurs in connection with such action, including attorneys' fees.

h. Each Coop member shall agree that in addition to legal remedies, the Board of Directors of each cooperative shall be entitled to injunctive relief in connection with the second and subsequent violations of this Agreement.

i. Each Coop member shall agree to waive and release any and all claims against Sea State and UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB.

8. Term. This Agreement shall take effect as of January 20, 2008. The initial term of this Agreement shall extend through November 1, 2008. The term of this Agreement shall be automatically extended for an additional year as of September 15 each year it remains in effect, i.e., as of September 15, 2008, the new expiration date of this Agreement shall be November 1, 2009, and so on. A party to this Agreement may terminate its status as a party by providing written notice to all other parties to this



Agreement to that effect, provided that the effective date of such party's termination shall be the expiration date of this Agreement in effect at the time the termination notice is delivered. For example, if a Coop provides termination notice on August 15, 2008, its termination shall not be effective until November 1, 2008. If a Coop provides termination notice on October 1, 2008, its termination shall not be effective until November 1, 2009. Notwithstanding any party's termination of its participation in this Agreement or the expiration of its term, the enforcement provisions of Section 5, above, shall survive with full force and effect.

9. Miscellaneous.

a. No amendment to this Agreement shall be effective against a party hereto unless in writing and duly executed by such party. The parties agree to amend this Agreement as reasonably necessary to conform with changes in law or circumstances.

b. This Agreement shall be governed by and construed in accordance with applicable federal law and the laws of the State of Washington.

c. This Agreement may be executed in counterparts which, when taken together, shall have the same effect as a fully executed original. Delivery of a signed copy of this Agreement by telefacsimile shall have the same effect as delivering a signed original.

d. The parties agree to execute any documents necessary or convenient to give effect to the intents and purposes of this Agreement.

e. All notices required to be given under this Agreement shall be deemed given five (5) days following deposit in certified first class U.S. mail, postage prepaid, with the correct address, or upon the first business day following confirmed telefacsimile or e-mail transmission to the recipient. Each party to this Agreement agrees to provide the name, postal address, telefacsimile number and e-mail address of its duly authorized representative(s) for purposes of receiving notices under this Agreement within three (3) days of executing this Agreement.

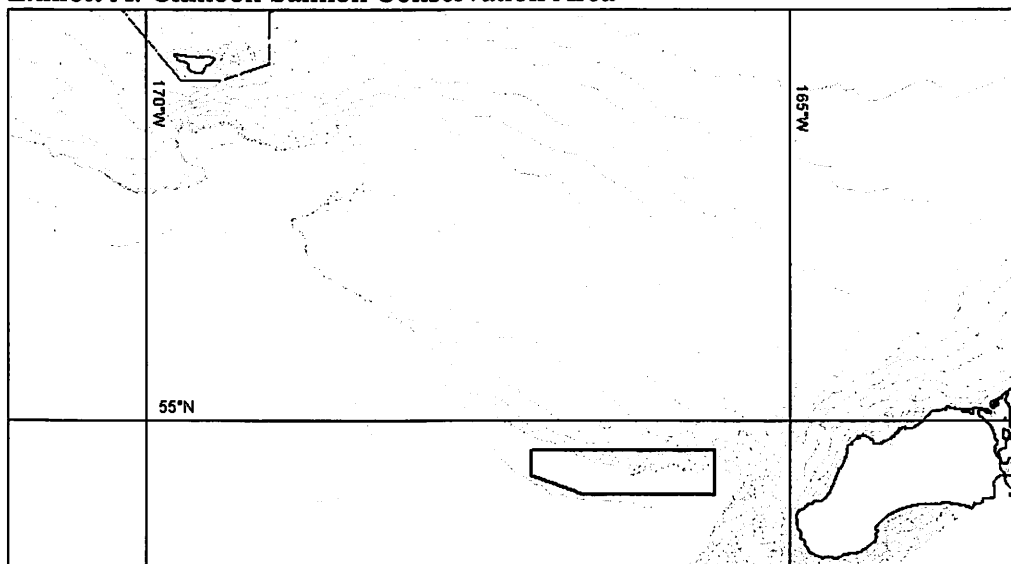
f. In the event that any provision of this Agreement is held to be invalid or unenforceable, such provision shall be deemed to be severed from this Agreement, and such holding shall not affect in any respect whatsoever the validity of the remainder of this Agreement.

g. Each Coop agrees to use its best efforts to resolve any disputes arising under this Agreement through direct negotiations. Breaches of this Agreement for which a party seeks a remedy other than injunctive relief that are not resolved through direct negotiation shall be submitted to arbitration in Seattle, Washington upon the request of any party to this Agreement. The party's written request will include the name

of the arbitrator selected by the party requesting arbitration. The other party will have ten (10) days to provide written notice of the name of the arbitrator it has selected, if any. If the other party timely selects a second arbitrator, the two arbitrators will select a third arbitrator within ten (10) days. If the other party does not timely select the second arbitrator, there shall be only the one arbitrator. The single arbitrator or the three (3) arbitrators so selected will schedule the arbitration hearing as soon as possible thereafter. Every arbitrator, however chosen, must have no material ties to any Coop or Coop member. The decision of the arbitrator (or in the case of a three (3) arbitrator panel, the decision of the majority) will be final and binding. The arbitration will be conducted under the rules of (but not by) the American Arbitration Association. The parties will be entitled to limited discovery as determined by the arbitrator(s) in its or their sole discretion. The arbitrator(s) will also determine the "prevailing party" and that party will be entitled to its reasonable costs, fees and expenses, including attorneys' and arbitrator fees, incurred in the action by said party. In no event will arbitration be available pursuant to this paragraph after the date when commencement of such legal or equitable proceedings based on such claim, dispute, or other matter in question would be barred by the applicable statute of limitations.

Entered into as of the date first set forth above.

**Exhibit A. Chinook Salmon Conservation Area**



**Corner Coordinates:**

Latitude		Longitude	
54	40	165	35
54	40	166	35
54	45	167	0
54	52	167	0
54	52	165	35

## **Appendix III**

### **Amendment 84 Rolling Hot Spot Closure Agreement For Non-Chinook Salmon Bycatch**

**As Amended and Restated for 2011**

AMENDED AND RESTATED  
BERING SEA POLLOCK FISHERY ROLLING HOT SPOT CLOSURE  
NON-CHINOOK SALMON BYCATCH MANAGEMENT AGREEMENT

This AMENDED AND RESTATED BERING SEA POLLOCK FISHERY ROLLING HOT SPOT CLOSURE NON-CHINOOK SALMON BYCATCH MANAGEMENT AGREEMENT is entered into by and among POLLOCK CONSERVATION COOPERATIVE (“PCC”), the HIGH SEAS CATCHERS COOPERATIVE (“High Seas”), MOTHERSHIP FLEET COOPERATIVE (“MFC”), the “Inshore Coops”, i.e., AKUTAN CATCHER VESSEL ASSOCIATION, NORTHERN VICTOR FLEET COOPERATIVE, PETER PAN FLEET COOPERATIVE, UNALASKA FLEET COOPERATIVE, UNISEA FLEET COOPERATIVE and WESTWARD FLEET COOPERATIVE, and the “CDQ Groups”, i.e., ALEUTIAN PRIBILOF ISLAND COMMUNITY DEVELOPMENT ASSOCIATION, BRISTOL BAY ECONOMIC DEVELOPMENT CORPORATION, CENTRAL BERING SEA FISHERMEN’S ASSOCIATION, COASTAL VILLAGES REGION FUND, NORTON SOUND ECONOMIC DEVELOPMENT CORPORATION and YUKON DELTA FISHERIES DEVELOPMENT ASSOCIATION, and SEA STATE, INC. (“Sea State”) and UNITED CATCHER BOATS ASSOCIATION (“UCB”) as of \_\_\_\_\_, 2010. PCC, High Seas, MFC, and the Inshore Coops are hereafter collectively referred to as the “Coops”.

This Agreement is entered into with respect to the following facts:

RECITALS

Western Alaskans have expressed conservation and allocation concerns regarding the incidental catch of non-Chinook salmon in the Bering Sea pollock fishery. While such bycatch is regulated by the North Pacific Fishery Management Council (the “Council”) and the National Marine Fisheries Service (“NMFS”), the Coops desire to address this issue by inter-cooperative agreement, out of respect for the concerns of Western Alaskans, to avoid unnecessary incidental catch of non-Chinook salmon and to obviate the need for regulatory salmon savings areas.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

## AGREEMENT

1. Purpose of Agreement. This Amended and Restated Non-Chinook Salmon Bycatch Management Agreement amends and supersedes that certain Salmon Bycatch Management Agreement entered into among the parties set forth above as of December 1, 2007. The purpose of this Agreement is to implement a private, contractual inter-cooperative program to reduce non-Chinook salmon bycatch in the Bering Sea directed pollock fishery, inclusive of both the Community Development Quota (“CDQ”) and non-CDQ allocations (the “Fishery”). Each party to this Agreement agrees exercise all commercially reasonable efforts to achieve that purpose.

2. Monitoring and Management. The Coops shall retain Sea State to facilitate vessel bycatch avoidance behavior, information sharing, data gathering, analysis, and fleet monitoring necessary to implement the bycatch management program contemplated under this Agreement. The Coops shall retain United Catcher Boats (UCB) as the ICA representative. UCB will provide day-to-day management of inter-cooperative matters related to the performance of this Agreement.

3. Bycatch Management. The parties agree that because the bycatch of non-Chinook salmon is typically very low during the Fishery “A” season, the bycatch management of non-Chinook salmon by this Agreement will occur during the Fishery “B” season. Therefore, non-Chinook salmon bycatch in the Fishery “B” season shall be managed on an inter-cooperative basis as follows. Sea State shall use a bycatch rate (the “Base Rate”) as a trigger for identifying areas to be closed to pollock fishing by certain Coops (“Chum Salmon Savings Areas”), and as a basis for determining each Coop’s tier status, which in turn shall govern whether, and if so, when, each Coop’s members may harvest pollock inside of a Savings Area. During “B” seasons, Sea State shall monitor non-Chinook salmon bycatch, and may announce Chum Salmon Savings Areas for non-Chinook salmon, and Sea State shall assign each Coop a bycatch tier status. In addition, Sea State shall have the authority to declare up to two Chum Salmon Savings Areas in the Bering Sea region east of 168 degrees West longitude (the “East Region”) and up to two Chum Salmon Savings Areas in the Bering Sea/Aleutian Islands region west of 168 degrees West longitude (the “West Region”). The non-Chinook salmon Base Rate shall be adjusted during each “B” season in response to non-Chinook bycatch rates, to take into account fluctuations in non-Chinook salmon encounters.

a. Initial non-Chinook Base Rate. The initial “B” season non-Chinook salmon Base Rate shall be 0.19 non-Chinook salmon per metric ton of pollock.

b. Non-Chinook Base Rate In-Season Adjustment. Commencing on July 1 of each year that this Agreement is in effect, and on each Thursday through the duration of each “B” season thereafter, Sea State shall recalculate the “B” season non-Chinook salmon Base Rate. The recalculated Base Rate shall be the three week rolling average of the Fishery “B” season non-Chinook bycatch rate for the then-current year. The recalculated Base Rate shall be the governing non-Chinook salmon Base Rate for

purposes of each "Thursday Announcement" of a "Friday Closure" (as defined below) following recalculation.

c. Implementation of Salmon Savings Measures. Sea State shall use Fishery "B" season bycatch data from fishing activity after June 10 of each year to provide Coops with preliminary information regarding the location and concentration of non-Chinook salmon, and to determine initial Chum Salmon Savings Area closures and Coop Tier assignments (as defined below). Sea State shall implement Chum Salmon Savings Area closures as appropriate upon non-Chinook bycatch rates exceeding the Base Rate, and thereafter through the balance of each Fishery "B" season.

d. Cooperative Tier Assignments. Rate calculations for purposes of tier assignments shall be based on each Coop's pollock catch in the Fishery for the prior two weeks (the denominator) and the aggregate amount of associated bycatch of non-Chinook salmon taken by its members (the numerator). For purposes of this Section, a Coop's non-Chinook salmon bycatch amount shall be based on observer data.

- Coops with non-Chinook salmon bycatch rates of less than 75% of the applicable Base Rate shall be assigned to "Tier 1."
- Coops with non-Chinook salmon bycatch rates equal to or greater than 75% of the applicable Base Rate but equal to or less than 125% of the Base Rate shall be assigned to "Tier 2".
- Coops with non-Chinook salmon bycatch rates greater than 125% of the applicable Base Rate shall be assigned to "Tier 3".

e. Bycatch Hot Zone Identification. When the Fishery "B" season is open to any of the inshore, catcher/processor or mothership components, on an ongoing basis Sea State shall calculate the non-Chinook bycatch rates for each Alaska Department of Fish and Game ("ADF&G") statistical area for which Sea State receives a non-Chinook salmon bycatch report, and when feasible, for each lateral half of each such statistical area. Bycatch rates shall be recalculated and updated every four (4) or seven (7) days during the season, immediately proceeding the closure announcements described in Section 4.g., below, as Sea State determines appropriate given the quality of data available for the area. The non-Chinook bycatch rates shall be calculated on the basis of reports Sea State determines to be adequately accurate, including reliable tow-by-tow estimates from the fishing grounds. In every case, rates calculated on the basis of the actual number of salmon observed per tow shall be given priority over rates based on sampling and extrapolation.

f. Chum Salmon Savings Areas. On each Thursday and on each Monday following June 10, for the duration of the Fishery "B" season, Sea State shall, subject to the criteria set forth below, provide notice to the Coops identifying one or more areas

designated as "Chum Salmon Savings Areas", within which pollock fishing shall be restricted on the basis of each Coop's Tier status.

(i) Savings Area Designation Criteria. To qualify as a Chum Salmon Savings Area, (a) an amount of pollock that Sea State in its sole discretion determines to be substantial must have been taken in the Savings Area during the period on which its designation as a Savings Area is based, or the area must have been designated a Savings Area for the prior notification period and there must be evidence satisfactory to Sea State in its sole discretion that suggests that non-Chinook salmon bycatch rates in the area are not likely to have changed, and (b) the salmon bycatch rate in the area for the period on which its definition as a Chum Salmon Savings Area is based must exceed the Base Rate. For purposes of (a), above, Sea State shall consider a pollock harvest of two percent (2%) of the total amount of pollock harvested in the Fishery during the period on which a Chum Salmon Savings Area designation is based to be indicative of, but not dispositive of, whether a substantial amount of pollock has been harvested in an area.

(ii) Savings Area Boundaries and Limitations. Subject to the limits set forth in this Section, Savings Areas shall be defined by a series of latitude/longitude coordinates as Sea State determines appropriate to address salmon bycatch. Notwithstanding the foregoing, the following limits shall apply to designations of "B" season Savings Areas: (i) Chum Salmon Savings Area closures in the East Region may not exceed three thousand (3,000) square miles in total area during any single closure period; (ii) Chum Salmon Savings Areas in the West Region may not exceed one thousand (1,000) square miles in total area during any single closure period; (iii) there may be up to two (2) Savings Areas per Region per closure period.

g. Savings Area Closure Announcements. Fishery "B" season Savings Area closures announced on Thursdays (the "Thursday Announcement" of the "Friday Closures") shall be effective from 6:00 pm the following Friday through 6:00 pm the following Tuesday, and Savings Area closures announced on Mondays (the "Monday Announcement" of "Tuesday Closures") shall be effective from 6:00 pm the following Tuesday through 6:00 pm the following Friday. Upon a Chum Salmon Savings Area closure taking effect, fishing by Coop vessels participating in the Fishery shall be restricted pursuant to Subsection 4.i., below. Each Thursday Announcement shall include the following information: (i) season update on pollock harvest and non-Chinook salmon bycatch by pollock fishery sector and in total; (ii) each Coop's updated rolling two week non-Chinook salmon bycatch rate, associated Tier status, and Savings Area closure dates, times and days; (iii) the coordinates describing each Chum Salmon Savings Area, and a map of the Area; (iv) non-Chinook salmon bycatch rates for each Alaska Department of Fish and Game statistical area in which there was directed pollock fishing during the previous week; and (v) updated vessel performance lists, as defined in 4.j., below. Each Monday Announcement shall include the information described in clauses (i), (iii), (iv), and a reminder to each Coop of its chum bycatch Tier status.

h. Savings Area Implementation. During the Fishery "B" seasons, Savings Area closures shall apply to Coop member vessels as follows. Chum Salmon Savings Areas announced as Friday Closures and as updated by Tuesday Closures shall be closed to fishing by Tier 3 Coop vessels for seven days. Chum Salmon Savings Areas announced as Friday Closures shall be closed to fishing by Tier 2 Coop vessels through 6:00 pm the following Tuesday. Tier 1 Coop vessels may fish in Chum Salmon Savings Areas closed to the Tier 2 and Tier 3 Coop vessels.

i. Vessel Performance Lists. On a weekly basis, Sea State shall provide salmon bycatch performance lists to the Coops calculated on the basis of non-Chinook bycatch.

i. A list of the 20 vessels with the highest non-Chinook bycatch rates for the previous 2 weeks in excess of the Base Rate.

ii. A list of the 20 vessels with the highest non-Chinook bycatch rates for the previous week in excess of the Base Rate.

j. Throughout the Fishery "B" season, Sea State shall provide salmon "hot spot" advisory notices concerning areas of high non-Chinook salmon bycatch that do not fall within Savings Area closures.

4. Data Gathering and Reporting. The Coops acknowledge that the effectiveness of the bycatch management program being implemented under this Agreement depends on rapidly gathering, analyzing and disseminating accurate data concerning non-Chinook salmon bycatch in the Fishery. The Coops therefore agree as follows.

a. Each Coop shall require its members to take all actions necessary to release their vessels' NMFS observer reports and official landing records to Sea State as soon as commercially practicable after such documents are completed. Each Coop shall request its members' vessels to exercise commercially reasonable efforts to report to Sea State within 24 hours the location of, estimated pollock tonnage of and estimated number of non-Chinook salmon in each trawl tow. PCC may satisfy its obligation under this section 6.a. by arranging to have its members' vessels' observer reports concerning non-Chinook salmon bycatch transmitted to Sea State. MFC and High Seas may satisfy their obligations under this Section by arranging to have the pollock amounts and non-Chinook salmon counts for their members' vessels reported to Sea State by the observers on the processing vessels to which their members' vessels deliver. The Inshore Coops shall arrange for their vessels to report the crew's best estimate of the amount of pollock and the number of non-Chinook salmon in the tow when reporting its location. Each Inshore Coop shall develop its own methods and means to accurately calculate (when feasible) or estimate the amount of pollock and the number of salmon contained in each tow by its members' vessels, and to rapidly and accurately report that information to Sea State.



b. Sea State shall from time to time announce a non-Chinook bycatch rate that shall trigger an incident reporting requirement. Each Coop shall require its members' vessels to notify their coop manager (if applicable), the intercooperative manager and, if feasible, Sea State as soon as possible of any tow with a non-Chinook salmon bycatch rate that the crew estimates to be equal to or greater than the incident reporting rate threshold.

5. Savings Area Closure Enforcement. Upon a Coop receiving a Savings Area closure notice which has the effect of closing one or more Savings Areas to fishing by its members' vessels under this Agreement, the Coop shall timely notify its members. Each Coop agrees to take enforcement action with respect to any violation of a Savings Area closure notice, and to collect the assessments set forth below in cases where a vessel is found to have violated a closure.

a. Sea State shall monitor the fishing activities of all Coops' members' vessels, and shall promptly report all apparent Savings Area violations to all Coops. For purposes of this Agreement, "fishing" shall mean all activity of a vessel between the time of initial gear deployment and final gear retrieval. For purposes of this Section 5.a., "gear deployment" and "gear retrieval" shall have the meanings given them in 50 C.F.R. 679.2 or its successor, as the same may be amended from time to time. Initial gear deployment shall mean setting trawl gear with an empty codend, and final gear retrieval shall mean retrieving trawl gear to either pull a codend aboard the vessel or to deliver the codend to another vessel.

b. Upon receiving notice of an apparent violation from Sea State, the Board of Directors of the Coop to which the vessel belongs shall have one hundred and eighty (180) days to take action in connection with the apparent violation, and to provide a report of the action taken and a copy of the record supporting that action to all other Coops. When the Board of Directors to which the vessel belongs provides its report, or if the Coop Board of Directors fails to provide its report within such 180 day period, then Sea State and/or UCB shall provide each other Coop, the CDQ Groups, the Association of Village Council Presidents ("AVCP"), Bering Sea Fishermen's Association ("BSFA"), Tanana Chiefs' Conference ("TCC") and Yukon River Drainage Fishermen's Association ("YRDFA") with the Coop's report (if provided) and the record developed by Sea State in connection with the apparent violation, and each of such parties shall have standing to pursue Savings Area closure enforcement actions equivalent to such Coop's own rights with respect to its members.

c. The Coops hereby adopt a uniform assessment for a skipper's first annual violation of a Savings Area closure of Ten Thousand Dollars (\$10,000.00), a uniform assessment for a skipper's second annual violation of a Savings Area closure of Fifteen Thousand Dollars (\$15,000.00), and a uniform assessment of Twenty Thousand Dollars (\$20,000.00) for a skipper's third and subsequent violations in a year. The Coops acknowledge that the damages resulting from violating a Savings Area closure are difficult to estimate, and that the foregoing assessment amounts are therefore intended to

be a substitute in all cases for direct, indirect and consequential damages. Therefore, the Coops agree that the assessment amounts established under this Subsection 5.c are liquidated damages, the payment of which (together with reasonable costs of collection) shall satisfy a Coop's and its members' obligations related to a Savings Area closure violation. The Coops hereby waive any and all claims to direct, indirect or consequential damages related to such violation.

d. The Coops agree that any funds collected in connection with a violation of this agreement, in excess of those necessary to reimburse the prevailing party for its costs and attorneys fees, shall be used to support research concerning salmon taken incidentally in the Fishery. The Coops agree to consult with the CDQ Groups, AVCP, BSFA, TCC and YRDFA regarding the most appropriate use of such funds.

e. For purposes of this Section 5, State and Federal landing reports, observer data, VMS tracking data, vessel log books and plotter data and Coop catch data produced by the Sea State in conformance with NMFS catch accounting and bycatch estimation procedures shall be presumed accurate and sufficient for determining whether a vessel violated a Savings Area closure, absent a clear and compelling demonstration of manifest error. The Coops agree to take all actions and execute all documents necessary to give effect to this provision.

f. The Coops agree to require their members to obtain and maintain an operational VMS unit approved by Sea State on their vessels, provided that such units are available on a commercially reasonable basis. The Coops agree to cause their members to release their VMS tracking data to Sea State. Sea State agrees not to disclose any such information, other than as specifically authorized under this Agreement, as necessary to fulfill the intents and purposes of this Agreement, or with prior consent from the affected vessel owner. The Coops agree that the damages resulting from vessels operating in non-compliance with this subsection are difficult to estimate, and the Coops therefore hereby adopt a uniform assessment of One Thousand Dollars (\$1,000.00) per day for each consecutive day over thirty (30) consecutive days that a Coop member's vessel is employed in the Fishery without an operational VMS unit approved by Sea State, provided such unit is available on a commercially reasonable basis.

6. Release and Waiver of All Claims Against SeaState and United Catcher Boats; Indemnification and Hold Harmless. The parties acknowledge that the effectiveness of this Agreement depends to a significant extent on Sea State's and UCB's discretion and judgment in designating and defining Savings Areas, determining each Coop's Tier status, monitoring compliance with Savings Area closures, and initiating and supporting enforcement actions under circumstances where a Coop member appears to have violated this Agreement. The parties further acknowledge that if Sea State or UCB were potentially liable for simple negligence in connection with such actions, it would be necessary for Sea State and UCB to charge a substantially larger fee for the services they provide in connection with this Agreement, to offset that potential liability. It is therefore in the parties' interest to reduce Sea State's and UCB's potential liability under this

Agreement. Therefore, the Coops and the CDQ Groups hereby waive and release any and all claims against Sea State and UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB. Further, the Coops jointly and severally agree to indemnify, defend and hold Sea State and UCB harmless against any third party claims asserted against Sea State or UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB.

7. ICA Representative contact information:

United Catcher Boats  
4005 20<sup>th</sup> Ave. West, Suite 116  
Seattle, WA 98199  
Phone: 206-282-2599  
Fax: 206-282-2414  
E-mail: penguin@ucba.org

8. Coop Membership Agreement Amendments. To give effect to this Agreement, the Coops agree to cause each of their Membership Agreements to include the following provisions.

a. Each member shall acknowledge that its vessel's operations are governed by this Agreement, and shall agree to comply with its terms.

b. Each member shall authorize its Coop's Board of Directors to take all actions and execute all documents necessary to give effect to this Agreement.

c. Each member shall authorize its Coop Board of Directors to enforce this Agreement, and if the Board fails to do so within one hundred eighty (180) days of receiving notice from Sea State that a cooperative member may have failed to comply with the Agreement, each member shall authorize each other Coop, each of the CDQ groups, AVCP, BSFA, TCC and YR DFA to individually or collectively enforce this Agreement.

d. Each member shall agree to maintain an operational VMS unit approved by Sea State on its vessel at all times that its vessel is participating in the Fishery, provided such VMS unit is available on a commercially reasonable basis, and shall agree to cause its vessel's VMS tracking data to be released to Sea State on a basis that permits Sea State to determine whether the member's vessel has operated in compliance with this Agreement. Each Coop member shall release to Sea State its State and Federal landing reports, observer data, VMS tracking data, and vessel log books and plotter data for purposes of determining its compliance with this Agreement, and agrees that in the event Sea State concludes that its vessel may have violated a hot spot closure, Sea State may release such data as Sea State in its sole discretion determines appropriate to facilitate enforcement of this Agreement.

e. Each member shall agree that the information contained in the records identified in d., above, shall be presumed accurate absent a clear and compelling demonstration of manifest error, and shall be presumed sufficient to determine its compliance with this Agreement.

f. Each member shall agree that the damages resulting from violating a Savings Area closure are difficult to estimate, and that the assessment amounts provided under this Agreement are therefore intended to be a substitute in all cases for direct, indirect and consequential damages. Each member shall agree that its Coop Board of Directors may modify Savings Area violation assessment amounts from time to time, as necessary to maintain an effective deterrent to Savings Area violations. Each member shall agree that each trawl tow during which the member's vessel fishes in a Savings Area in violation of this Agreement shall constitute a separate violation for purposes of assessment calculation. Each member shall agree that damages for violating this Agreement shall apply on a strict liability basis, regardless of a member's lack of knowledge of the violation or intent to violate the agreement. Each member shall agree that actual damages for violating this Agreement would be difficult to calculate, and shall therefore agree to pay the assessment amounts established under this Agreement, as amended from time to time, as liquidated damages. Each member agrees to modify its skipper contracts to make its skipper(s) fully responsible for the assessments levied in connection with a breach of the agreement. Further, each member agrees that in the event a skipper fails to assume such assignment of liability, or in the event such assumption of liability is deemed invalid, the member shall be liable for the full amount of such assessment, and all related costs and attorneys' fees.

g. Each member shall agree that in connection with any action taken to enforce this Agreement, the prevailing party shall be entitled to the costs and fees it incurs in connection with such action, including attorneys' fees.

h. Each member shall agree that in addition to legal remedies, the Board of Directors of each cooperative, each of the CDQ groups, BSFA and YRDFA shall be entitled to injunctive relief in connection with the second and subsequent violations of this Agreement.

i. Each member shall agree to waive and release any and all claims against Sea State and UCB arising out of or relating to Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by Sea State or UCB.

j. Each member shall acknowledge that, notwithstanding the definition of "fishing" used in this Agreement (which is the consistent with the definition used by NMFS for logbook entries and observer reporting purposes), it is the Coops' policy that no member's vessel will be present in a Savings Area that is closed to fishing by such Coops' members' vessels unless and until such vessel's trawl doors have been fully

retrieved or stored. Further, each member shall agree that, absent extenuating circumstances, such member exercise its best efforts to comply with this policy.

9. Term. This Agreement shall take effect as of November 30, 2010. The initial term of this Agreement shall extend through November 1, 2013. The term of this Agreement shall be automatically extended for an additional year as of September 15 each year it remains in effect, i.e., as of September 15, 2011, the new expiration date of this Agreement shall be November 1, 2014, and so on. A party to this Agreement may terminate its status as a party by providing written notice to all other parties to this Agreement to that effect, provided that the effective date of such party's termination shall be the expiration date of this Agreement in effect at the time the termination notice is delivered. For example, if a Coop provides termination notice on August 15, 2011, its termination shall not be effective until November 1, 2013. If a Coop provides termination notice on October 1, 2011, its termination shall not be effective until November 1, 2014. Notwithstanding any party's termination of its participation in this Agreement or the expiration of its term, the enforcement provisions of Section 7, above, shall survive with full force and effect.

10. Breach and Termination of Exemption. Each Coop acknowledges that, as of the opening of the 2011 "B" season Fishery, NMFS is expected to issue an annual exemption to the regulatory salmon savings closures (the "Exemptions") to each Coop that is a party to and complies with this Agreement. Further, each Coop acknowledges that a Coop's material breach of this Agreement that is not timely cured shall result in forfeiture of such Coop's right to retain its Exemption. The following shall constitute material breaches of this Agreement:

(i) a Coop failing to take enforcement action within one hundred eighty (180) days of being notified by Sea State of an apparent violation of a Savings Area closure by one or more of its members, as provided in Section 5.b, above;

(ii) a Coop failing to collect and/or disburse an assessment in compliance with this Agreement within one hundred eighty (180) days of a determination that its member(s) violated a Savings Area closure, as provided in Sections 5.c and 5.d, above;

(iii) a Coop failing to collect and/or disburse an assessment in compliance with this Agreement within one hundred eighty (180) days of a determination that a member of the Coop failed to maintain an available, operational VMS unit approved by Sea State on its vessel as provided in Section 5.f of this Agreement and/or failed to cause such vessel(s) to release their VMS tracking data to Sea State as provided in Section 5.f of this Agreement.

In the event of a material breach of this Agreement by a Coop that is not cured within thirty (30) days of such Coop's authorized representative receiving written notice of such breach from one or more other Coop(s), a CDQ Group, AVCP, BSFA, TCC or YR DFA, any one of such parties may demand that the breaching Coop tender its Exemption to

NMFS, and such Coop shall do so within ten (10) days. If a Coop fails to timely tender its Exemption, any of such parties may seek injunctive relief requiring such Coop to tender its Exemption.

11. Annual Compliance Audit. The Coops shall annually retain an entity that is not a party to this Agreement (the "Compliance Auditor") to review and prepare a report concerning Sea State's performance of its monitoring and notification obligations under this Agreement and actions taken by the Coops in response to all notifications from Sea State to the Coops regarding potential violations of this Agreement. All parties to this Agreement will be provided an opportunity to participate in selecting the non-party Compliance Auditor. Sea State and the Coops shall cooperate fully with the Compliance Auditor, and shall provide any information the Compliance Auditor requires to complete its review and report. If the Compliance Auditor identifies a failure to comply with this Agreement as part of its review, the Compliance Auditor shall notify all parties to this Agreement of the failure to comply, shall distribute to all parties to this Agreement the information used to identify the failure to comply, and shall provide notice of any such failures in the Compliance Auditor's final report.

12. Miscellaneous.

a. No amendment to this Agreement shall be effective against a party hereto unless in writing and duly executed by such party. The parties agree to amend this Agreement as reasonably necessary to conform with changes in law or circumstances.

b. This Agreement shall be governed by and construed in accordance with applicable federal law and the laws of the State of Washington.

c. This Agreement may be executed in counterparts which, when taken together, shall have the same effect as a fully executed original. Delivery of a signed copy of this Agreement by telefacsimile shall have the same effect as delivering a signed original.

d. The parties agree to execute any documents necessary or convenient to give effect to the intents and purposes of this Agreement.

e. All notices required to be given under this Agreement shall be deemed given five (5) days following deposit in certified first class U.S. mail, postage prepaid, with the correct address, or upon the first business day following confirmed telefacsimile or e-mail transmission to the recipient. Each party to this Agreement agrees to provide the name, postal address, telefacsimile number and e-mail address of its duly authorized representative(s) for purposes of receiving notices under this Agreement within three (3) days of executing this Agreement.

f. In the event that any provision of this Agreement is held to be invalid or unenforceable, such provision shall be deemed to be severed from this Agreement, and

such holding shall not affect in any respect whatsoever the validity of the remainder of this Agreement.

g. Each Coop agrees to use its best efforts to resolve any disputes arising under this Agreement through direct negotiations. Breaches of this Agreement for which a party seeks a remedy other than injunctive relief that are not resolved through direct negotiation shall be submitted to arbitration in Seattle, Washington upon the request of any party to this Agreement. The party's written request will include the name of the arbitrator selected by the party requesting arbitration. The other party will have ten (10) days to provide written notice of the name of the arbitrator it has selected, if any. If the other party timely selects a second arbitrator, the two arbitrators will select a third arbitrator within ten (10) days. If the other party does not timely select the second arbitrator, there shall be only the one arbitrator. The single arbitrator or the three (3) arbitrators so selected will schedule the arbitration hearing as soon as possible thereafter. Every arbitrator, however chosen, must have no material ties to any Coop or Coop member. The decision of the arbitrator (or in the case of a three (3) arbitrator panel, the decision of the majority) will be final and binding. The arbitration will be conducted under the rules of (but not by) the American Arbitration Association. The parties will be entitled to limited discovery as determined by the arbitrator(s) in its or their sole discretion. The arbitrator(s) will also determine the "prevailing party" and that party will be entitled to its reasonable costs, fees and expenses, including attorneys' and arbitrator fees, incurred in the action by said party. In no event will arbitration be available pursuant to this paragraph after the date when commencement of such legal or equitable proceedings based on such claim, dispute, or other matter in question would be barred by the applicable statute of limitations.

## **Appendix IV**

### **2011 Amendment 84 Annual Report**



Report to the North Pacific Fishery Management Council  
on the 2011  
Bering Sea Pollock Intercooperative Salmon Avoidance  
Agreement

Karl Haflinger, Sea State Inc. - Intercoop Monitor  
John Gruver, AFA Catcher Vessel Intercooperative Manager

This report is to the North Pacific Fishery Management Council and covers the Bering Sea and Aleutian Islands Management Area (BSAI) Pollock Intercoop Salmon Avoidance Agreement ("ICA"). During the course of the B season fishery, the pollock Intercoop closed 67 areas to fishing based on high bycatch rates of chum salmon experienced by vessels working in the area. Maps of the closures are shown in Appendix 1.

Under the terms of the ICA, applicants are to submit to the Council a report analyzing:

1. Estimated number of salmon avoided as demonstrated by the movement of fishing effort away from salmon hot-spots.
2. A compliance/enforcement report that will include the results of an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance with the agreement, and a report on the effectiveness of enforcement measures stipulated under the ICA in cases of non-compliance. Examination of a randomly selected subset of vessel/days representing 10% of the catch during each season will be used as the basis of the audit.

**Number of non-Chinook salmon taken during the fishery:**

For the sake of comparison we have included catch and bycatch amounts running back to 1993. These data are compiled from plant landing information for catcher vessels

**Introduction.** In 2011 all AFA qualified inshore catcher vessels were members of the Inshore Salmon Savings Incentive Plan (SSIP) Agreement. The Inshore SSIP was first submitted for approval by NMFS on September 30, 2010 and approved on November 5, 2010. An amended Inshore SSIP Agreement was submitted for approval on June 21, 2011. We received NMFS approval for the amended Agreement on June 28, 2011. The SSIP approved on June 28 continues in place for 2012 with all inshore catcher vessels still members.

The 2011 Inshore SSIP report is a requirement under the Amendment 91 regulations. Each required reporting element is covered in Sections 1 through 4.

The Inshore Chinook Salmon Savings Incentive Plan Agreement is found at the end of this report as Appendix 1.

**Section 1. A comprehensive description of the incentive measures in effect in the previous year.**

The following paragraph comes from page 5 of the Inshore Salmon Savings Incentive Plan Agreement and captures the main elements of the Incentive Plan Agreement (IPA).

**Agreement Summary.** The vessels participating in this IPA receive an annual allocation of Chinook salmon bycatch units, which limits their Chinook salmon PSC bycatch to their pro-rata share of the 47,591 Chinook salmon PSC performance standard, less Insurance Pool deductions for Inshore Cooperative Vessels. A vessel can earn additional Chinook bycatch units by catching fewer Chinook salmon PSC as bycatch than the amount of its annual allocation, at a rate of one (1) additional unit for every three (3) allocated units that are not used. The Insurance Pool is a Chinook bycatch unit reserve, which is available to Inshore Sector Cooperative Vessels whose Chinook bycatch exceeds the number of bycatch units they hold. Inshore Sector Cooperative Vessels using Insurance Pool bycatch units are required to repay the Insurance Pool, and to pay an additional Insurance Pool usage penalty. If the inshore sector's Chinook salmon bycatch exceeds its performance standard for two (2) years in a six (6) consecutive year period, each Cooperative is required to take all actions necessary to insure that the Chinook salmon bycatch of its Vessels does not exceed the Annual Threshold Amount for a third (3<sup>rd</sup>) year in a seven (7) consecutive year period. A rolling hot spot closure program closes areas of relatively high Chinook salmon PSC bycatch to vessels that have relatively high rates of Chinook salmon bycatch during periods when the vessels participating in this IPA are experiencing relatively low levels of Chinook salmon encounter.

**Earning Savings Credits.** As described above, the main incentive for members of the SSIP to minimize Chinook bycatch whenever possible is by earning additional Chinook bycatch units. These earned units are called Savings Credits. Each SSIP vessel is given an initial set of bycatch units called Base Cap Credits (its share of the 47,591 performance Standard). On an annual basis, a vessel earns one Savings Credit for every 3 Base Cap credits not caught in that year. Without having earned Savings Credits, a vessel may never exceed its share of the performance standard. In other words, the additional Chinook bycatch allowance of 60,000 bycaught salmon

provided to vessels participating in an accepted IPA is not available for use by a SSIP vessel that has not earned Savings Credits. Consequently, without having earned Savings Credits, a vessel is forced to fish as though it was limited to its share of a 47,591 hard cap.

While earning Savings Credits is the strongest incentive in the SSIP, there are several mechanical attributes of the SSIP that contribute to keeping bycatch low whenever possible. First off, Savings Credits, once earned, are not held in perpetuity, but have a life span of 5 years. Therefore SSIP vessels are not able to “rest on their laurels” after a couple of low bycatch years. Because the nature of Chinook bycatch is so variable from one year to the next, vessels are driven to generate Savings Credits at all times. Limitations on how transfer may occur also play a key role in keeping bycatch low.

**Transfers.** While the SSIP does provide for the transfer of Salmon Credits between vessels, there are limitations on transfers. Vessels may only transfer their initially assigned Base Cap Credits. Savings Credits are not transferable and may only be used in the harvest of a vessel’s assigned pollock allocation whose previous pollock harvest resulted in earning those Savings credits.

Transfers defined in the SSIP mainly cover transfer situations that involve both pollock and salmon. These transfers are intended to allow coops to continue operations under the SSIP in a manner consistent with pollock transfers that took place prior to implementation of Amendment 91. Called Blended Paired Transfers and Trip Specific Transfers, these types of transfers combine pollock quota and Salmon Credits together in a balanced fashion. Also, the SSIP provides transfers of both pollock and salmon for very specific conditions pertaining to hardship situations and season completing “mop-up” fishing. While these very specific transfer situations do allow for less balancing of pollock and salmon, their use is very limited.

The transfer of salmon by itself is allowed (Base Cap Credits only) but not without the possibility of an additional salmon tax on salmon only transfers. Vessels receiving a salmon only transfer are subject to a variable tax rate as set by a tax table in the Inshore SSIP Agreement. Vessels receiving salmon only transfers under low bycatch conditions must acquire additional credits that are retired from the program for the remainder of the year. The table setting the tax rates is found in Exhibit 1 of the SSIP Agreement. The tax put on salmon only transfers is designed to put pollock into the hands of cleaner fishermen rather salmon into the hands of dirtier fishermen.

Inter-sector transfers, transfers from one pollock sector to the inshore sector, while allowed under the Amendment 91 regulations are not freely allowed under the SSIP rules. Inter-sector transfers may not be used in a way that puts the inshore sector in jeopardy of exceeding the inshore Performance Standard.

**Insurance Pool.** As both a protective measure and an incentive measure, the SSIP requires each member to contribute to a collective insurance pool. The pool is in place to buffer vessels that

may exceed their available credit limit in each season against regulatory caps. To further incentivize vessels from using the insurance pool, and take precautionary steps towards exceeding their salmon credit allocation, accessing the insurance pool carries a repayment penalty ranging from 150% to 300% depending on the precautions the vessel exhibited on the trip that triggered the overage.

**Rolling Hot Spot Program.** The Inshore SSIP includes a rolling hot spot component similar to the RHS program previously found in the Amendment 84 regulations. While not a direct incentive based element, the addition of an RHS component to the SSIP provides a mechanism for minimizing bycatch during low periods of abundance when it may be difficult for a SSIP fisherman to otherwise make knowledgeable Chinook avoidance decisions.

The program is run at the vessel level rather than at the coop level and vessels are assigned to either of two tier levels; Tier 1 vessels are exempt from the weekly closures and Tier 2 vessel are closed out for the entire week. The SSIP RHS program is suspended once SSIP Chinook bycatch exceeds 25% of the aggregate Base Cap Credits available for any given season.

## **Section 2. A description of how these incentive measures affected individual fishing vessels.**

Simply making vessel specific allocations of a hard cap provides a very strong incentive for vessels to reduce their bycatch. The difficulty comes when a fisherman has progressed far enough into a low bycatch season that the hard cap no longer seems within reach. Under these conditions a vessel may let their bycatch reduction efforts relax. To keep the incentive strong at all levels of Chinook encounters, the SSIP offer continuous motivation to fishermen for the reduction of Chinook bycatch.

Few things do more to get a fisherman's attention than to tell them they only get so much of something to use in the course of fishing. Whether it be the amount of quota they have to catch, length of season they have to catch it in, gallons of fuel they can burn, or limits on Chinook bycatch; more is better. The SSIP does just that, without telling the vessels how to reduce bycatch it simply tells them that in keeping bycatch low whenever possible they will be rewarded with a higher season limit when Chinook bycatch becomes unavoidable.

Without having earned Savings Credits a SSIP vessel is restricted to their share of the 47,591 Performance Standard (Base Cap Credits), less their contribution to the SSIP Insurance Pool. A SSIP vessel that has maximized its available Savings Credits increases its annual limit by 26%. That is strong incentive; the possibility of obtaining a 26% increase is very difficult to ignore.

Additionally, along the lines of "more is better", having earned Savings Credits not only gets a boat through the high bycatch years, maximizing Savings Credits is also a way to access pollock quota beyond a vessel's initial allocation. The SSIP not only inspires the reduction of Chinook

bycatch, it promotes the possibility of additional pollock harvest by fishermen that have managed their salmon credit allocations more frugally.

**Section 3. An evaluation of whether incentive measures were effective in achieving salmon savings beyond levels that would have been achieved in absence of the measures.**

Earning Savings Credits is the main incentive of the Inshore SSIP. The Inshore SSIP members caught a total of 18,484 Chinook salmon in 2011. The inshore sector's share of the Performance Standard is 26,484. The Inshore SSIP caught 8,135 Chinook less than the Performance Standard creating a total of 2,711 Savings Credits earned.

Earning the 2,711 Savings Credits did not come without a price. Towards the end of the 2011 pollock season the Inshore SSIP vessels were faced with increasingly high Chinook bycatch rates. For many vessels the fear of not earning Savings Credits for the year, or even worse consuming the Savings Credits they already held in their accounts, looked to be too high of a price to pay for the amount of pollock that may be caught. Consequently some Inshore SSIP vessels did not catch their entire 2011 pollock quota. In 2011 the inshore sector left 33,199 metric tons of pollock unharvested.

However, in addition to both earning and protecting previously earned Savings Credits, there is an underlying regulatory component to all Chinook IPAs that is also a strong measure in evaluating whether an IPA is effective in reducing bycatch in absence of the IPA measures. That regulatory component requires each pollock sector to stay under its share of the 47,591 Performance Standard in 3 out of 7 years. Upon a sector exceeding its Performance Standard the third time, the sector loses its IPA hard cap at the 60,000 level and must now operate under its share of a 47,591 had cap. That amounts to a 26% reduction for the inshore sector.

In response to this Performance Standard regulation IPAs must contain provisions preventing the IPA group from exceeding the Performance Standard 3 times in a 7 year period. Keeping in mind that exceeding the Performance Standard by even a single fish qualifies as 1 of the 2 years, the inshore sector is very wary of exceeding the Performance Standard even once. The commitment to not exceeding the Performance Standard saves Chinook salmon in comparison to a program that did not include this requirement.

**Section 4. A description of any amendments in the terms of the IPA that were approved by NMFS since the last annual report and the reasons that the amendments to the IPA were made.**

Being the first operational year of the Amendment 91 Inshore Salmon Savings Incentive Plan Agreement there are no annual changes to report. However, the Inshore SSIP, as previously mentioned, was amended mid-season of 2011. The amendments are as follows:

1. The definition of Trip Specific Transfers was changed to allow Trip Specific Transfers to originate from multiple vessels instead of a single vessel as defined in the original IPA.
2. Original language on "Monitoring and Reporting Salmon Credit Usage" has the following additional language inserted on the end of the final sentence of the original Agreement; "...**or as specifically authorized by the authorized representative of the Inshore Sector Cooperatives.**"
3. "Vessel Tier Assignments" was amended to track vessel bycatch rates for the "**prior 2 weeks**" instead of the prior 3 weeks as found in the original IPA. The 3 week period was written in error and should have originally been 2 weeks; a 2 week period is consistent with previous Rolling Hot Spot agreements.
4. The section on "Savings Area Designation Criteria" had no language changes from the original IPA, but there was an error in the original submission. "Exhibit 2" as referenced in this section was not included in original; that Exhibit 2 is now found at the end of the IPA with the other exhibits. Consequently Exhibits 2 and 3 in the original IPA are now labeled Exhibits 3 and 4.
5. "Savings Area Boundaries and Limitations" has had the reference to using only the "**A season**" bycatch history from 2000-2009 for Chinook Savings Area closures removed. This removal allows both A and B season bycatch history to be used in establishing the closure areas. Note that a reference to Exhibit 3 has been added to this paragraph as well.
6. "Compliance Agreement" is now referenced to Exhibit 4 as previously mentioned. Also note that all members to this IPA are currently members of inshore cooperatives. The original IPA included 2 participants that were not members of an inshore cooperative in 2010 when the original IPA was submitted, those IPA members, the Northwest Explorer and Leslie Lee, are now members of the Akutan and Unalaska Coops.
7. For the reasons mentioned above, the signature page no longer requires individual vessel signatures, only those from the representatives from the six inshore cooperatives, United Catcher Boats, and Sea State.

**Appendix 1.**

**Inshore Salmon Savings Incentive Plan Agreement**

**as amended in June 2011**

**Report to the North Pacific Fishery Management Council  
on the 2011  
Bering Sea Pollock Intercooperative Salmon Avoidance  
Agreement**

**Karl Haflinger, Sea State Inc. - Intercoop Monitor  
John Gruver, AFA Catcher Vessel Intercooperative Manager**

This report is to the North Pacific Fishery Management Council and covers the Bering Sea and Aleutian Islands Management Area (BSAI) Pollock Intercoop Salmon Avoidance Agreement ("ICA"). During the course of the B season fishery, the pollock Intercoop closed 67 areas to fishing based on high bycatch rates of chum salmon experienced by vessels working in the area. Maps of the closures are shown in Appendix 1.

Under the terms of the ICA, applicants are to submit to the Council a report analyzing:

1. Estimated number of salmon avoided as demonstrated by the movement of fishing effort away from salmon hot-spots.
2. A compliance/enforcement report that will include the results of an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance with the agreement, and a report on the effectiveness of enforcement measures stipulated under the ICA in cases of non-compliance. Examination of a randomly selected subset of vessel/days representing 10% of the catch during each season will be used as the basis of the audit.

**Number of non-Chinook salmon taken during the fishery:**

For the sake of comparison we have included catch and bycatch amounts running back to 1993. These data are compiled from plant landing information for catcher vessels delivering to shoreside processors, and observer data for mothership catcher vessels and catcher-processors. The "other salmon" category includes all non-chinook salmon.



Observer data for both offshore and shoreside deliveries show that only very small numbers of salmon other than chum in this category (for example, 152 unidentified, 31 pinks, and 5 silvers for the 2006B season EFP).

*Table 1. Catch and bycatch of pollock and salmon in the directed pollock fishery by season and for full years, 2000 – 2011.*

Year	B season pollock*	B season other salmon bycatch
1993	740,569	242,473
1994	718,582	89,117
1995	647,865	17,625
1996	633,639	77,028
1997	546,988	64,504
1998	539,432	60,040
1999	511,211	44,261
2000	631,755	57,228
2001	813,022	50,948
2002	866,034	83,033
2003	876,784	170,688
2004	858,799	427,234
2005	878,618	637,957
2006	874,435	276,779
2007	775,261	82,641
2008	572,384	14,453
2009	469,128	38,040
2010	471,983	13,585
2011	681,480	191,517

\* For the years 1993-1999, total groundfish from P and B targets, available on files from NMFS site (below), were used instead of pollock.

*Estimates of salmon bycatch for 1993-1999 are for all P and B trawl target fisheries, including CDQ, and are available on the NOAA Fisheries, Ak Region web site. (<http://www.fakr.noaa.gov/sustainablefisheries/catchstats.htm>)*

### **Evaluation of salmon savings.**

The evaluation of the number of salmon saved by the IC program is based on tracking vessels that fished in a closed area before it closed, and then comparing their subsequent bycatch to see if it was lower than expected if the area had not closed. Put more simply, we perform a before-and-after comparison of the bycatch observed and expected from the vessels that triggered the closure. The procedure is as follows:

1. Extract all observer data for haul locations falling inside a closure area, for a 5 day period preceding the closure. For shoreside catcher vessels, aggregate the hauls that have the same "start fishing date" so that hauls with the same bycatch rate are not artificially repeated. As an example, if 2 hauls from the same catcher vessel trip show up in the closed area, they will have the same bycatch rate because observers pro-rate bycatch evenly across all hauls. Consider them a single observation with a value equal to the sum of the two hauls' pollock and salmon.
2. Consider all of independent offshore sector (C/P and mothership) hauls, and combined "trip-level" hauls to be estimates of the bycatch ratio  $R_i = \sum y_i / \sum x_i$ , where y are counts of chinook or chum salmon, and x is the pollock catch from individual hauls (offshore sector) or grouped, same-trip hauls (shoreside), and i indicates a separate closure.
3. Extract the same haul or "grouped" haul information, for the same vessels, for the duration of the closure (either 3 or 4 days). Their associated bycatch is available from either observer or plant delivery information. Compute their expected bycatch had they been able to stay and fish inside the now-closed area, by summing the pollock catch of all vessels in this category, and multiplying this summed pollock catch by the matching bycatch ration,  $R_i$  above.
4. Compute the standard error of this estimated Y (overall salmon bycatch if vessels had stayed in the area and fished with bycatch rate R) treating R as a ratio estimator (Snedecor and Cochran, Statistical Methods, 8<sup>th</sup> Edition, p 452).

**Avoidance results from the 2011 Intercoop Agreement**

Locations of the 2011 closures are shown in Figure 1.

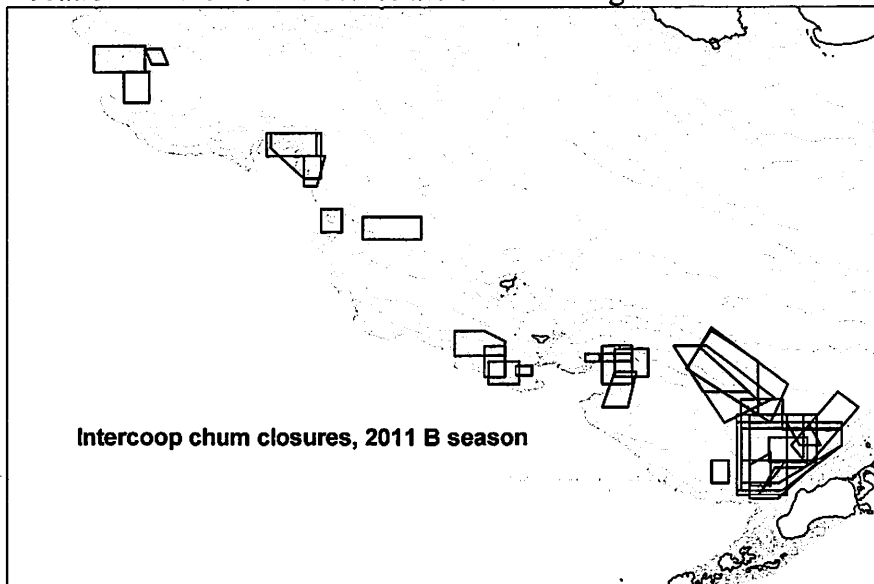


Figure 1. 2011 IC chum closures

Table 2 summarize of the results for both chum and chinook savings resulting from these closures (Appendix Tables A1a-c show the underlying data, by closure, with associated standard errors). An estimated 86,338 mt of observed groundfish was associated with boats that fished inside areas before they were closed. These same vessels caught an estimated 146,846 mt of groundfish in the five day interval following the respective closure. An estimated 79,657 fewer chum were taken outside the closures than would have been expected had the same amount of pollock been taken inside the closures, based on the comparison of rates inside and outside closure areas. Chinook reduction were minimal: 76 chinook fewer taken than the estimated 1,154 that would have been caught at within-closure rates. These bycatch reductions represent a 63% decrease in expected chum bycatch, and a 7% decrease in expected chinook bycatch.

Table 2. Chum salmon closure effectiveness

Closure statistic	Bycatch species	
	Chinook	Chum
Pollock catch (inside, before closures)	86,338	86,338
Pollock catch (outside, after closures)	146,846	146,846
Actual bycatch (outside closures)	1,078	46,939
Expected bycatch (at pre-closure rate)	1,154	126,596
Savings	76	79,657
% reduction	7%	63%

A comparison with results from chum closures from previous years is shown in Table 3. The "After-closure pollock" column shows the total tonnage of pollock harvested by vessels that fished inside closures in the 5-day interval before they closed. This amount of pollock can be viewed as having been moved from inside the closure area to outside due to the closures. The 2011 amount (146,846 mt) is larger as an absolute amount, and much larger as a percentage of the B season harvest, than we have seen in any other year since the program began. The number is higher than in any previous year partly because the ICA approved under the original Amendment 84 regulations was intended to protect both Chinook and chum salmon, with Chinook bycatch reduction being the higher priority. Therefore, chum RHS closures were discontinued once Chinook RHS closures were triggered. The implementation of Amendment 91 removed all Chinook elements of the original Amendment 84 regulations, thereby eliminating the replacement of chum RHS closures for those protecting Chinook salmon. Consequently the number of chum RHS closures, and therefore the associated pollock catch moved as a result of these closures, has increased in 2011.

*Table 3. Comparison of the effects of chum closures across years.*

Year	After-closure pollock	% of harvest affected	Chinook savings	Chinook % reduction	Chum savings	Chum % reduction
2006	23,049	3%	-97	-21%	65,299	64%
2007	107,646	14%	-----	56%	75,970	82%
2008	3,448	1%	53	82%	768	73%
2009	5,701	1%	52	50%	6,270	76%
2010	12,537	3%	61	85%	1,808	84%
2011	146,846	22%	73	7%	79,657	63%

**Compliance/ Enforcement**

Ten apparent violations were referred to coops on November 2, 2011. The coops to which these vessels belong have until May 28, 2012 to meet and decide on the validity of these apparent violations.

An audit of Sea State compliance monitoring has again been awarded to ABR Inc of Fairbanks, Alaska. ABR reviewed 10% of the coop fishing records and associated VMS information. The draft report for this audit states that:

“We found that our verdicts agreed with Sea State’s determination in all cases. Our 10% subsample did not identify any errors in Sea State’s original determinations, and we did not further investigate locations outside of our subsample”

**Appendix 1. Before-and-after closure fishing comparisons, by closure.**

Date	"Before" closure pollock	"After" closure pollock catch	"After" closure chinook	Estimated chinook catch without closure	Chinook reduction (estimate-actual)	Std Err chinook estimate	"After" closure chum catch	Estimated chum catch without closure	Chum reduction (estimate-actual)	Std Err chum estimate	Number of samples prior to closure	Number of samples after closure
06/17/11	5,600	10,392	19	7	-11	1.7	6,309	9,803	3,494	492.2	37	41
06/21/11	22,103	10,576	10	18	8	2.3	3,452	6,833	3,381	392.6	138	45
06/24/11	3,207	5,600	3	9	6	1.5	1,805	3,294	1,489	271.2	31	24
06/28/11	326	2,035	1	6	5	1.0	1,599	2,170	571	103.8	7	7
07/01/11	1,249	1,352	0	2	2	0.2	114	1,813	1,699	36.8	23	4
07/05/11	403	1,499	1	6	5	1.1	250	2,352	2,102	169.2	8	8
07/05/11	670	3,619	0	0	0	0.0	120	3,558	3,436	79.1	11	4
07/08/11	3,003	3,506	3	9	6	2.4	2,405	5,252	2,847	737.2	20	18
07/12/11	748	2,178	5	0	-5	0.0	383	4,698	4,313	700.9	9	10
07/15/11	1,283	1,832	0	4	4	2.2	1,677	1,858	180	336.6	11	13
07/15/11	4,674	12,428	8	8	-1	1.0	2,436	6,147	3,710	209.0	56	36
07/19/11	382	77	0	0	0	0.0	883	329	-555	295.1	5	2
07/22/11	4,420	5,352	17	2	-15	1.0	751	2,190	1,438	247.8	32	29
07/22/11	5,519	13,104	10	2	-8	0.2	1,140	1,522	382	45.7	57	13
07/26/11	908	2,211	16	3	-13	0.8	158	397	239	21.5	12	9
07/26/11	720	5,150	19	0	-19	0.0	2,229	1,894	-335	182.9	7	6
07/29/11	420	1,176	11	14	3	3.3	327	268	-39	26.9	6	6
07/29/11	4,220	9,747	4	9	5	0.6	1,094	10,787	9,693	270.7	47	9
08/02/11	24	22	0	1	0		53	10	-44		1	1
08/02/11	30	152	1	1	0		17	6	-11		1	2
08/05/11	668	3,517	4	0	-4	0.0	630	2,824	1,994	312.0	8	6
08/09/11	2,889	4,420	7	14	7	2.4	1,980	7,465	5,485	934.5	32	28
08/12/11	3,276	6,977	53	7	-46	1.8	2,927	3,250	324	268.6	31	35
08/12/11	888	5,597	10	13	3	0.7	188	8,240	8,052	317.1	19	9
08/18/11	2,572	3,996	28	1	-28	0.2	1,026	2,021	995	61.7	48	16
08/19/11	5,220	4,419	56	22	-34	2.6	1,403	3,168	1,765	200.0	65	34
08/23/11	277	536	4	6	2	1.0	23	353	330	37.8	7	6
08/28/11	1,614	4,089	36	53	17	4.4	2,394	2,224	-170	119.3	28	19
08/30/11	1,985	3,235	49	10	-39	1.1	1,116	4,976	3,860	489.5	25	13
09/02/11	653	2,933	33	80	47	3.6	188	7,018	6,830	133.1	15	5
09/06/11	197	150	5	0	-5	0.0	87	590	502	44.4	2	1
09/09/11	86	294	27	1	-26		152	1,040	889		1	2
09/13/11	56	69	19	2	-18	1.5	34	89	55	2.9	2	2
09/16/11	1,881	1,879	234	231	-3	29.0	1,241	1,683	442	179.7	25	18
09/16/11	399	1,327	41	80	39	3.2	138	239	101	10.9	7	2
09/20/11	241	719	114	165	52	6.9	151	709	557	69.2	5	5
09/20/11	689	229	2	1	-1	0.6	979	485	-494	125.9	15	4
09/27/11	830	1,263	2	50	48	1.8	37	5,306	5,269	252.3	24	6
09/30/11	94	1,325	63	56	-7	3.2	214	1,815	1,601	24.4	4	4
09/30/11	582	775	8	5	-3	0.7	24	1,157	1,133	115.4	10	3
10/04/11	196	2,509	30	141	111	5.3	793	1,949	1,156	30.6	4	4
10/07/11	174	1,521	43	96	53	5.5	253	1,029	776	18.4	3	3
10/11/11	23	346	4	0	-4		38	90	52		1	1
10/11/11	880	1,929	49	4	-45	0.6	77	2,475	2,398	129.7	11	5
10/14/11	60	397	3	0	-3		17	173	156		1	1
10/21/11	43	588	24	14	-10	0.7	3,628	1,235	-2,393	24.7	2	2
	86,338	146,846	1,078	1,154	76		46,939	126,596	79,657			

## Appendix 2: Dirty 20 list appearances

Number of times each vessel was on a 2011 chum weekly dirty 20 list

Vessel	N times on list	Vessel	N times on list	Vessel	N times on list
AJ	0	Golden Alaska	0	PACIFIC CHALLENGER - MS	4
Alaska Ocean	3	GOLDEN DAWN	5	PACIFIC EXPLORER	3
ALASKA ROSE	3	GOLDEN PISCES	1	PACIFIC FURY	6
ALASKAN COMMAND	8	GREAT PACIFIC	4	Pacific Glacier	0
ALDEBARAN	3	GUN-MAR	5	PACIFIC KNIGHT	0
ALEUTIAN CHALLENGER	1	HALF MOON BAY	0	PACIFIC MONARCH	0
ALSEA	5	HAZEL LORRAINE	0	PACIFIC PRINCE	5
ALYESKA	0	HICKORY WIND	1	PACIFIC RAM	0
AMERICAN BEAUTY - INSHORE	2	Highland Light	0	PACIFIC VIKING	6
AMERICAN BEAUTY - MS	1	INTREPID EXPLORER	0	PAPADO II	0
AMERICAN CHALLENGER	0	Island Enterprise	4	PEGASUS	3
American Challenger	0	Katie Ann	0	PEGGY JO	0
American Dynasty	3	Kodiak Enterprise	4	PERSEVERANCE	0
AMERICAN EAGLE	4	LESLIE LEE	1	POSEIDON	2
American Enterprise	0	LISA MELINDA	0	PREDATOR	1
American Triumph	1	MAJESTY	0	PROGRESS	4
ANITA J	3	MARCY J	1	PROVIDIAN	0
ARCTIC EXPLORER	9	MARGARET LYN	0	RAVEN	0
Arctic Fjord	1	MAR-GUN	0	ROYAL AMERICAN	4
Arctic Storm	0	MARK I	7	ROYAL ATLANTIC	2
ARCTIC WIND	6	MESSIAH	0	SEA STORM	0
ARCTURUS	7	MISS BERDIE	0	Sea Storm	0
ARGOSY	4	MISTY DAWN	3	SEA WOLF	1
AURIGA	3	MORNING STAR	6	SEADAWN	6
AURORA	4	MS AMY	0	Seattle Enterprise	2
BERING ROSE	6	MUIR MILACH	0	SEEKER	2
BLUE FOX	4	Muir Milach	0	SOVEREIGNTY	6
BRISTOL EXPLORER	5	NEAHKAHNE	0	Starbound	3
CAITLIN ANN	5	Neahkahnie	0	STARFISH	6
CALIFORNIA HORIZON	3	NORDIC EXPLORER	0	STARLITE	3
CAPE KIWANDA	2	NORDIC FURY - INSHORE	1	STARWARD	4
CHELSEA K	7	NORDIC FURY - MS	5	STORM PETREL	1
COLLIER BROTHERS	6	NORDIC STAR	6	SUNSET BAY	0
COLUMBIA	3	Northern Eagle	2	TOPAZ	0
COMMODORE	2	Northern Glacier	0	TRACY ANNE	0
DEFENDER	5	Northern Hawk	2	Tracy Anne	0
DESTINATION	3	Northern Jaeger	3	TRAVELER - INSHORE	0
DOMINATOR	3	NORTHERN PATRIOT	9	TRAVELER - MS	3
DONA MARTITA	0	NORTHWEST EXPLORER	0	US Enterprise	0
ELIZABETH F	1	OCEAN EXPLORER	2	VANGUARD - INSHORE	0
Endurance	0	OCEAN HARVESTER	0	VANGUARD - MS	2
EXCALIBUR II	2	Ocean Harvester	0	VESTERALEN	7
Excellence	0	OCEAN HOPE 3	0	VIKING	8
EXODUS	0	OCEAN LEADER - INSHORE	1	VIKING EXPLORER	6
FIERCE ALLEGIANCE	3	OCEAN LEADER - MS	5	WALTER N	2
FORUM STAR	0	Ocean Phoenix	0	WESTERN DAWN - INSHORE	1
Forum Star	0	Ocean Rover	2	WESTERN DAWN - MS	1
GLADIATOR	2	OCEANIC	5	WESTWARD I	3
GOLD RUSH	1	PACIFIC CHALLENGER - INSHORE	0		

**Report to the**  
**North Pacific Fishery Management Council**  
**on the 2011**  
**Bering Sea Pollock**  
**Mothership Salmon Savings Incentive Plan**

**F. Joseph Bersch III, IPA Representative**

This report is to the North Pacific Fishery Management Council and covers the Bering Sea and Aleutian Islands Management Area (BS) Pollock Mothership Salmon Savings Incentive Plan agreement (“MSSIP” or “Agreement”).

**Amendment 91 Reporting Requirements**

Amendment 91 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Fishery combines a hard cap on the amount of Chinook salmon that may be caught incidentally with an incentive plan agreement (“IPA”) and a Performance Standard designed to minimize bycatch to the extent practicable in all years and prevent bycatch from reaching the limit in most years. The regulations implementing Amendment 91 require participants engaged in an IPA to submit to the Council an annual report including:

- (1) A comprehensive description of the incentive measures in effect in the previous year;
- (2) A description of how these incentive measures affected individual vessels;
- (3) An evaluation of whether incentive measures were effective in achieving salmon savings beyond levels that would have been achieved in absence of the measures; and
- (4) A description of any amendments to the terms of the IPA that were approved by NMFS since the last annual report and the reasons that the amendments to the IPA were made.

Each is addressed below.

## **Description of MSSIP Incentive Measures**

The MSSIP contains two key incentive measures: the ability to earn Salmon Savings Credits for use in later years, and a rolling hotspot closure (“RHC”) program that restricts access to fishing grounds where bycatch is unacceptably high.

Each operator of a Vessel participating in the MSSIP is motivated to avoid Chinook salmon as a means to earn Salmon Savings Credits in order to establish “insurance” against years when encounter rates are particularly high and bycatch amounts, even after best avoidance efforts are taken, are higher than the Amendment 91 Performance Standard (the “Annual Threshold”). Earned credits give Vessels the ability to exceed the Annual Threshold in years of high encounters. These credits offer the Vessel the ability to harvest all, or at least more, of its annual pollock allocation than it could if limited to the Annual Threshold. The primary incentive in the MSSIP is the ability to earn these credits for use in future years.

The RHC program establishes the incentive to maintain low bycatch rates in order to have access to all productive fishing grounds. Fleets achieving relatively low Chinook salmon bycatch rates are not constrained by hotspot closures, while Fleets with average or higher rates are. The RHC program complements Salmon Savings Credits and motivates Vessels to find ways and means to harvest pollock while avoiding Chinook salmon bycatch at all times.

The RHC program provides for the designation of Bycatch Avoidance Areas closed to fishing when the rate of Chinook salmon bycatch in that area (the “Area Rate”) exceeds the Base Rate. The Base Rate is an index of relative Chinook salmon abundance defined as the ratio of the three week rolling sum of total Chinook salmon taken incidentally in the Fishery to the three week rolling sum of the total number of metric tons of pollock caught in the Fishery. The Base Rate is updated weekly, with rules for the first three weeks of the “A” season or “B” season to determine initial Base Rates. The RHC program insures that Fleets failing to meet that standard are excluded from those fishing areas with the highest bycatch rates.

## **Effect of Incentive Measures on Individual Vessels**

Mothership fishing operations are uniquely dependent upon individual fishermen’s ability to work cooperatively. Since many decisions related to salmon avoidance strategies must be made collectively by the Vessels and processor working together in a Fleet (or two processors in a “pooled Fleet”), it is at that level where the incentive to avoid Chinook salmon at all rates of encounter is most appropriately directed. Under the MSSIP, incentives to avoid Chinook salmon bycatch are established at both the individual Vessel and at the Fleet level, such that individual incentives are carefully balanced with the maintenance of cohesive and efficient Fleets.

Under the MSSIP, each Fleet manages a share of the Mothership Sector Annual Threshold equal to that Fleet’s percentage of the mothership pollock allocation. In 2011, three Fleets participated in the MSSIP, consisting of eighteen Vessels. Two of these Fleets participated as a pooled Fleet, where the Fleets’ shares of salmon bycatch were aggregated. Each Fleet avoided Chinook salmon bycatch such that total incidental catch remained significantly below the Fleet’s share of the Annual Threshold, thus generating Salmon Savings Credits. At the end of the season, the total Salmon Savings Credits generated by each Fleet or pooled Fleet was disaggregated and distributed to each Vessel in proportion to the Vessel’s percentage of contribution to the Fleet or



pooled Fleet's pollock allocation. Accordingly, Vessels participating in a Fleet with lower Chinook salmon bycatch generated more Salmon Savings Credits than Vessels participating in a Fleet with higher bycatch.

During the course of the 2011 fishery, the MSSIP and RHC program closed four areas to fishing in order to avoid bycatch of Chinook salmon. Also, under the terms of the Agreement, the "Chinook Salmon Conservation Area" (approximately 735 sq. miles) remained closed to Vessels participating in the MSSIP during the 2011 "A" season. No other areas were closed during the 2011 "A" season. During the "B" season, the RHC program identified and closed three Bycatch Avoidance Areas. Maps and effective dates of the closures are shown at Appendix 1.

### Evaluation of Effectiveness

In 2011, the three Fleets participating in the mothership sector collectively avoided incidental catch of Chinook salmon such that the total bycatch was 77.8% of the mothership sector's portion of the Annual Threshold (the "Base Cap"). Total Chinook salmon bycatch was 822 salmon below the Annual Threshold. The total Salmon Savings Credits generated by the participants in the MSSIP was 359 Chinook salmon. It is not possible to assess how many salmon would have been incidentally caught in the mothership sector in the absence of a salmon savings IPA for the mothership sector; however, if there were no salmon savings IPA, Vessels would not have had the incentive to avoid Chinook salmon bycatch in order to earn Salmon Savings Credits. There would have been no benefit to individual Vessels for avoidance of salmon up to the Base Cap.

Vessels also saved Chinook salmon by being restricted from fishing in Bycatch Avoidance Areas designated under the RHC program. Generally, areas closed by the RHC program result in lower bycatch rates in the weeks following the closures. If Vessels encounter high bycatch rates when relocating to new fishing grounds, additional closures are designated, which tends to reduce Chinook salmon bycatch overall. In 2011, the RHC program saved an estimated 545 Chinook salmon due to Vessels being restricted from fishing in Bycatch Avoidance Areas, as summarized in Table 1.

In addition, the MSSIP requires that on an annual basis the participants engage knowledgeable and competent third-parties to conduct compliance audits of the MSSIP rules and the RHC program. Audit results are attached at Appendix 2.

**Table 1 - Evaluation of Effectiveness of IPA Incentives, 2011**

Closure Date	Area Bycatch Rate Pre-Closure (Chinook per MT Pollock)	Fishery Bycatch Rate Post-Closure (Chinook per MT Pollock)	Difference (Chinook per MT Pollock)	Catch of Pollock Week After Closure	Imputed Reduction in Bycatch (Number of Chinook Savings)
10/7/2011	0.182	0.180	0.002	2,208	4
10/14/2011	0.202	0.350	-0.148	1,263	-187
10/21/2011	0.991	0.096	0.896	814	729
				<b>Total</b>	<b>545</b>

## **Amendments to IPA Approved by NMFS**

Two Amendments were made to this IPA during the 2011 reporting period. One Amendment was made in 2011, approved by NMFS on February 4, 2011. The 2011 Amendment set forth Salmon Savings Credits earned by the participants in the MSSIP during the 2010 MSSIP Pilot Program that preceded the formal regulatory implementation of the MSSIP in 2011. The Pilot Program gave the participants the opportunity to evaluate rules of the program, test assumptions that went into the program's design, and generate Salmon Savings Credits to carry into the first year of implementation under Amendment 91. The Amendment incorporated the Salmon Savings Credits earned under the Pilot Program into the MSSIP.

In the process of evaluating the effectiveness of the MSSIP during 2011 for the annual report, the IPA Representative became aware of several technical corrections and improvements to the MSSIP. Accordingly, the Mothership Fleet Cooperative Entity approved a second Amendment to the MSSIP, which was submitted to NMFS and approved on March 21, 2012. Deemed effective by the Mothership Fleet Cooperative for 2011, the second Amendment corrects typographical errors and inconsistent use of terminology; changes Rules for aggregating Available Cap, calculating Fleet Salmon Savings Credits and end-of-season disaggregation of Available Cap, and execution of Paired Transfers and Unpaired Transfers; and clarifies provisions of the RHC program. The change to Rules for aggregation and disaggregation allow two Fleets to pool their Available Cap and was adopted to reflect changed operations within the mothership sector due to the merger of two mothership companies.

## **Additional Voluntary Reporting**

In a final rule published February 3, 2012, NMFS published additional reporting requirements for annual IPA reports, including information about sub-allocations of Chinook salmon PSC amounts and information regarding any in-season transfers of Chinook salmon PSC. Specific information to be included regarding sub-allocations include the number of Chinook salmon PSC and amount of pollock (mt) at the start of each fishing season allocated to participating Vessels, and the number of Chinook salmon PSC and amount of pollock (mt) caught at the end of each season. With regard to in-season transfers of Chinook salmon PSC, the final rule requires reporting of transfers between entities and transfers among vessels in the IPA. For each, the specific information to be reported includes the date of transfer; name of transferor and transferee; number of Chinook salmon PSC transferred; and amount of pollock (mt) transferred. The requirements added in the February 3, 2012 rule go into effect starting with the 2012 reporting cycle, due April 1, 2013, and do not apply to the 2011 annual report. Nonetheless, this annual report provides such information following the format described in that rule.

## **Sub-allocations of Chinook Salmon PSC**

The MSSIP provided for individual vessel sub-allocations in proportion to the individual vessels' percentages of pollock under the terms of the MFC. These percentages are detailed in Table 2, grouped by Fleet within which the individual vessels participated.

**Table 2 - Sub-Allocations of Chinook Salmon PSC and Pollock Amounts, By Vessel, Start 2011**

<b>Vessel</b>	<b>Co-op %</b>	<b>2011 Base Cap</b>	<b>2011 Pollock Amount</b>
Margaret Lyn	5.643%	209.186	6,238.34
Mark 1	6.251%	231.725	6,910.48
Traveler	4.272%	158.363	4,722.70
Vesteraalen	6.201%	229.871	6,855.21
<b><i>Excellence Fleet Total</i></b>	<b><i>22.367%</i></b>	<b><i>829.145</i></b>	<b><i>24,726.72</i></b>
Aleutian Challenger	4.926%	182.607	5,445.69
Alyeska	2.272%	84.223	2,511.70
American Beauty	6.000%	222.420	6,633.00
Ocean Leader	6.000%	222.420	6,633.00
Pacific Challenger	9.671%	358.504	10,691.29
Vanguard	5.350%	198.325	5,914.43
<b><i>Golden Alaska Fleet Total</i></b>	<b><i>34.219%</i></b>	<b><i>1,268.498</i></b>	<b><i>37,829.10</i></b>
California Horizon	3.786%	140.347	4,185.42
Mar-Gun	6.251%	231.725	6,910.48
Misty Dawn	3.569%	132.303	3,945.53
Morning Star	3.601%	133.489	3,980.91
Nordic Fury	6.177%	228.981	6,828.67
Oceanic	7.038%	260.899	7,780.51
Pacific Fury	5.889%	218.305	6,510.29
Papado II	2.953%	109.468	3,264.54
Western Dawn	4.150%	153.841	4,587.83
<b><i>Ocean Phoenix Fleet Total</i></b>	<b><i>43.414%</i></b>	<b><i>1,609.357</i></b>	<b><i>47,994.18</i></b>
<b>MFC Total</b>	<b>100%</b>	<b>3,707</b>	<b>110,550.00</b>

**Season Totals**

The number of Chinook salmon PSC and amount of pollock (in metric tons) caught at the end of each season are detailed in Table 3, by Fleet.

**Table 3 – Number of Chinook Salmon PSC and Pollock Amounts Caught, by Season, 2011**

Season	Fleet	Number of Chinook Salmon	Amount of Pollock (mt)
<b>A season</b>	Excellence	94	11,305.69
	Golden Alaska	178	15,075.88
	Ocean Phoenix	187	17,743.50
	<b>Total MSSIP</b>	<b>459</b>	<b>44,125.07</b>
<b>B season</b>	Excellence	7	7,898.32
	Golden Alaska	888	22,104.90
	Ocean Phoenix	1,531	35,727.78
	<b>Total MSSIP</b>	<b>2,426</b>	<b>65,731.00</b>

**In-season Transfers of Chinook Salmon PSC**

In the 2011 MSSIP, no in-season Transfer of Chinook salmon PSC or pollock occurred among AFA cooperatives, entities eligible to receive Chinook salmon PSC allocations, or CDQ groups. No Transfers occurred among Vessels participating in the MSSIP during the 2011 pollock fishery. Three Fleet to Fleet Paired Transfers (Transfers of pollock and corresponding Chinook salmon PSC) occurred during 2011. Details of these Fleet-to-Fleet Transfers are provided in Table 4.

**Table 4 – Fleet-to-Fleet Transfers of Chinook Salmon PSC and Pollock, 2011**

Date	Transferor	Transferee	Number of Chinook Salmon PSC	Amount of Pollock (mt)
3/21/11	Ocean Phoenix	Excellence	30	900.00
6/10/11	Excellence	Ocean Phoenix	33	1000.00
6/25/11	Excellence	Ocean Phoenix	25	750.00

Submitted by:

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# Appendix 1 - 2011 Area Closures Under the MSSIP and RHC Program

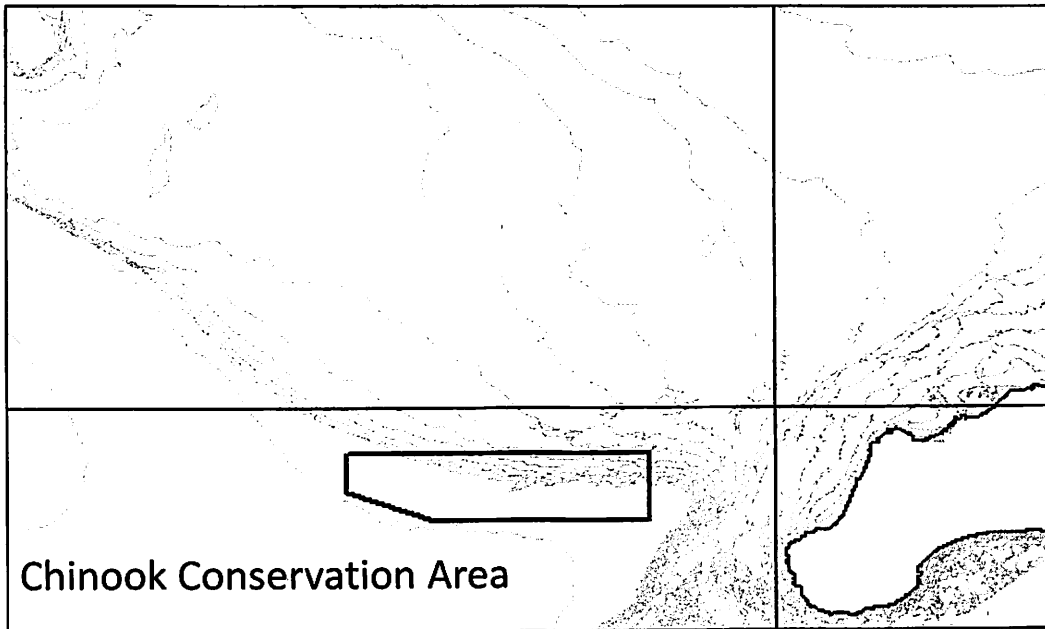


Figure A1-1. A season Chinook salmon closure, effective entire season.

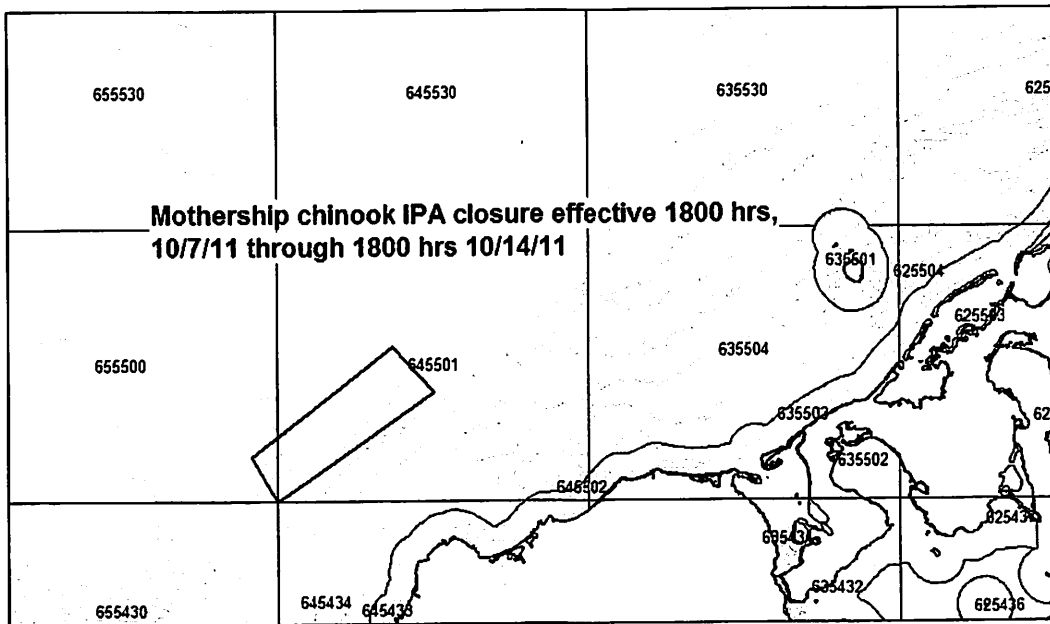
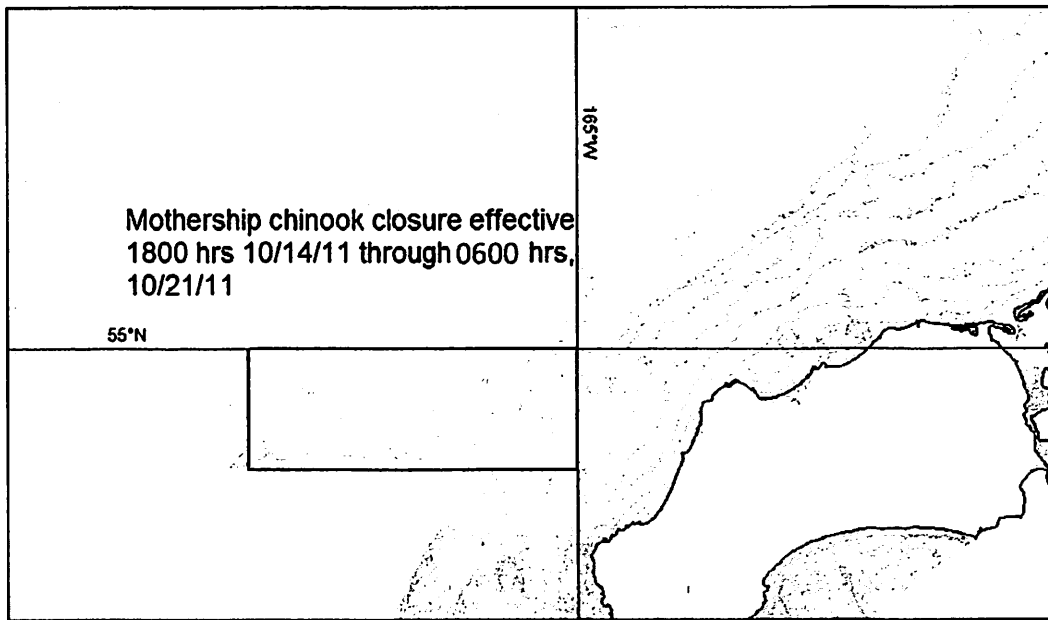
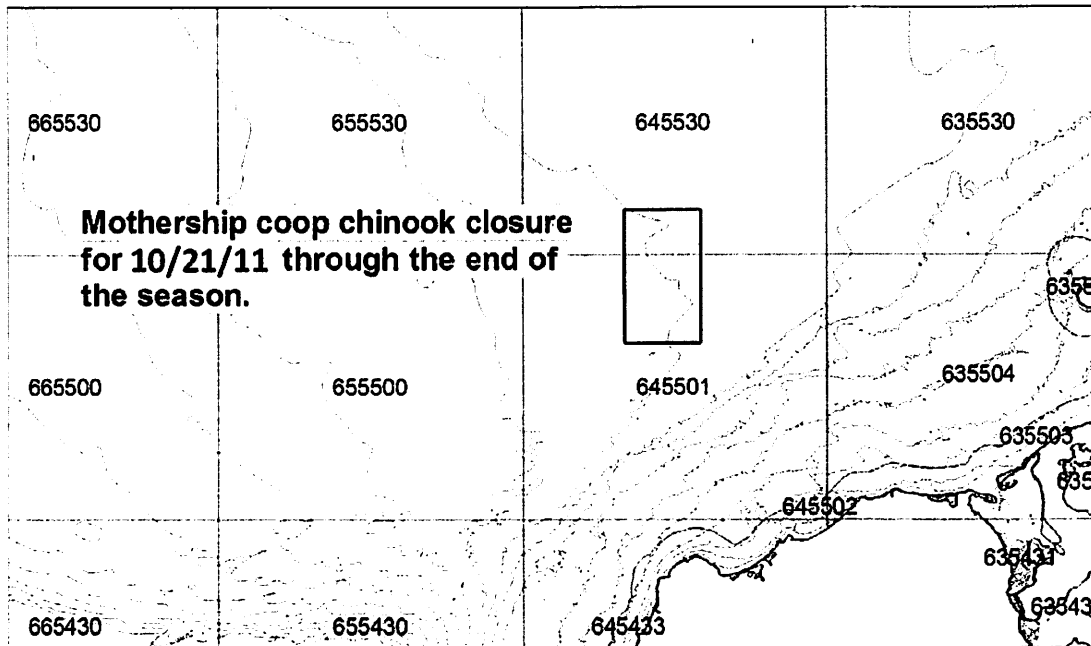


Figure A1-2. B season Chinook salmon closure effective 10/7/2011 through 10/14/2011.



**Figure A1-3. B season Chinook salmon closure effective 10/14/2011 through 10/21/2011.**



**Figure A1-4. B season Chinook salmon closure effective 10/21/2011 through end of season.**

Appendix 2 - Audit of MSSIP Rules and RHC Program

**MSSIP AUDIT,  
MOTHERSHIP FLEET COOPERATIVE,  
BERING SEA POLLOCK FISHERY, 2011**

Prepared for  
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March 2012

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## Background

The Mothership Sector of the Bering Sea / Aleutian Islands Pollock Fishery has agreed to follow the rules set up in the Mothership Salmon Savings Incentive Plan Agreement (MSSIP). This agreement includes the provision that “knowledgeable and competent third-parties” will “conduct compliance audits of the MSSIP rules and the Rolling Hotspot Closure program.” The following report briefly describes the results of the compliance audit conducted by ABR, Inc.—Environmental Research and Services (hereafter, ABR) for the Mothership Fleet Cooperative (MFC).

## Rolling Hotspot Closure Program

### Audit Methods

All vessels participating in the pollock fishery, including those in the MFC, have fisheries observers which provide haul deployment and retrieval times, catch, and bycatch weights for pollock and Chinook salmon. In addition, vessels are equipped with Vessel Monitoring System (VMS) units, which transmit vessel locations periodically during the fishing seasons.

We received observed haul data, processed VMS locations, and closure documents from the RHC Manager. Haul data and VMS locations were derived from raw data obtained from the National Marine Fisheries Service. Closure polygons and Fleet-level closure dates were generated from the closure documents. In order to assess compliance with the RHC program, we examined the geospatial and temporal relationship between VMS locations, observed hauls, Vessel / Fleet assignments, and closure polygons. Intersections between closures (both spatially, temporally, and according to Fleet membership) and VMS locations indicate vessels fishing in a hotspot closure (or Chinook Conservation Area for all “A” season locations) when it applied to their Fleet, and constitutes a violation of the RHC program.

To the extent possible, we also examined the RHC Manager’s calculations of rates and performance benchmarks, and the implementation of Bycatch Avoidance Areas.

### Results and Discussion

For the “A” season we compared VMS locations during observed fishing activity against the Chinook Conservation Area and found no violations of the closure (Figure 1). Because this wasn’t a rolling closure, it falls under Rule 16 of the MSSIP, rather than Rule 15 (RHC program), but the analysis is similar so we report the results here.

We repeated this analysis for the four “B” season closures identified in the documents from the RHC Manager and found no violations. (Figures 2–5)

The calculations of rates and performance benchmarks, as reported in the closure documents, matched the haul data, and all the “B” season closures were largely within the Bycatch Avoidance Core Areas as identified in the MSSIP. The last closure, identified in closure document MS\_IPA\_102711.doc had boundaries slightly outside the



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Unimak Core Area, but item 2 in the RHC program does not express that the By-catch Avoidance Areas are to be entirely within the Core Areas and provides the RHC Manager with discretion to adjust the boundaries to take into account spatial shifts in seasonal patterns of relative Chinook salmon abundance.

## **Mothership Salmon Savings Incentive Plan Agreement Rules**

### **Audit Methods**

We used 2011 MFC pollock allocation percentages, Vessel / Fleet Assignments, Mothership MSSIP Transfer Request forms, salmon bycatch data from the RHC Manager, and 2010 credit data from Appendix F of the MSSIP Agreement to assess compliance with MSSIP Agreement rules. We included both 2011 amendments to the MSSIP in our investigation: the February 4, 2011 amendment incorporating the Pilot Program Salmon Savings Credits; and the March 21, 2012 amendment which corrected and improved the Plan, and incorporated rules which allows Fleets to pool their Available Cap.

### **Results and Discussion**

We performed per-Vessel and per-Fleet calculations of Available Cap (Rule 1), Management Buffer Adjustment (2), Aggregation of Available Cap (3), Chinook Salmon Bycatch (4), Salmon Savings Credits (5), and Disaggregation of Remaining Available Cap (7) and concluded that these rules were applied appropriately.

There were three Fleet-level transfers (Rule 8), and a Change of Platform (11) that were done in accordance with the MSSIP Rules.

Rules 9, 10, 12, and 14 did not occur or didn't apply in 2011, and the remaining rules (6 and 13) required no calculations or are part of this report (15 and 17).

## **Conclusions**

ABR concludes that, based on the data available, 1) there were no violations of the Chinook Salmon Conservation Area, nor of the closures established as part of the Rolling Hostspot Closure Program, and 2) the rules established in the Mothership Salmon Savings Incentive Plan Agreement were followed, and Salmon Savings Credits were calculated in accordance with the Plan rules. We did not consider data sources beyond the Mothership Fleet Cooperative and the RHC Manager, but the concordance of the data between these sources supports the use of this information and our conclusion.

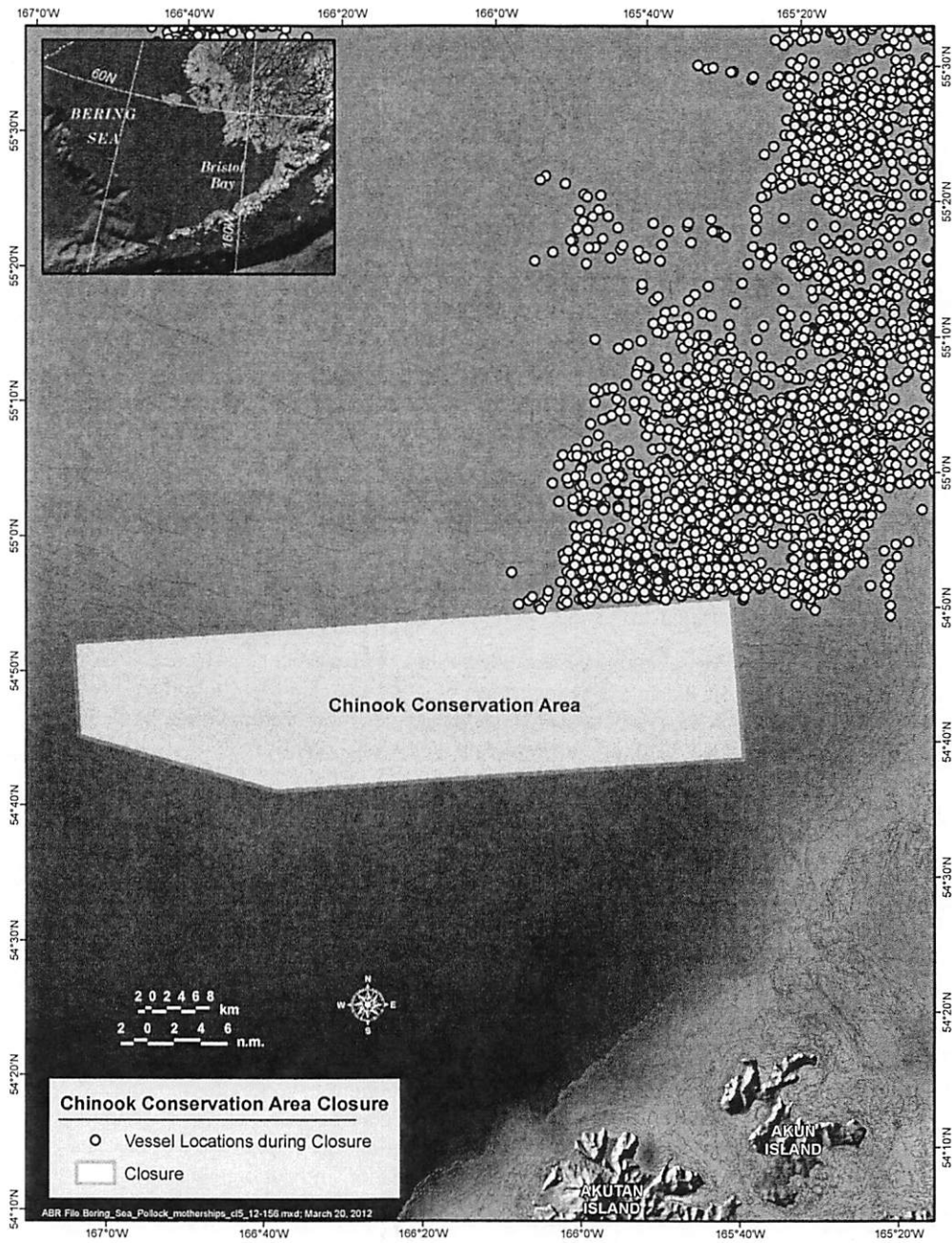


Figure 1: Chinook Salmon Conservation Area

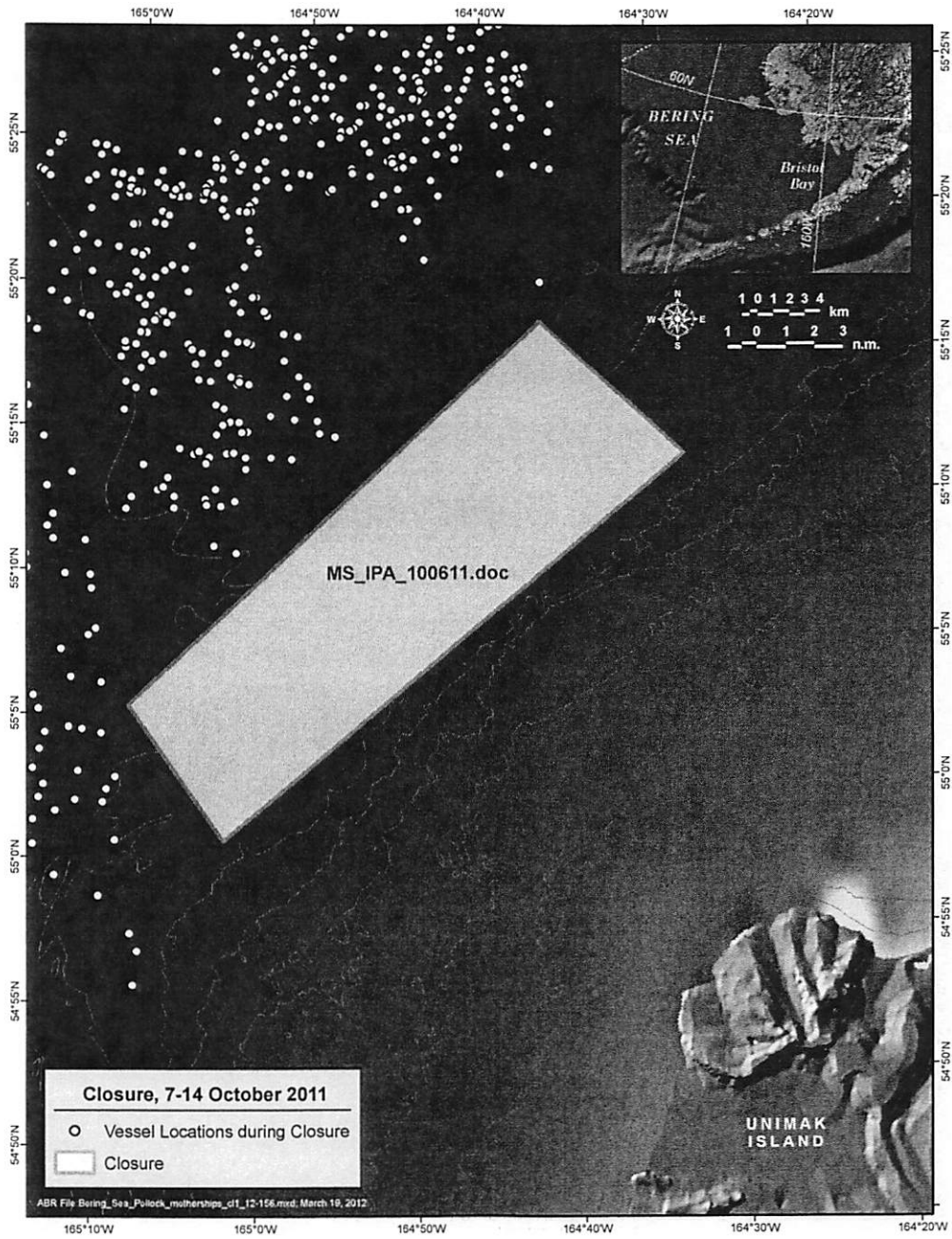


Figure 2: October 7, 2011 Closure

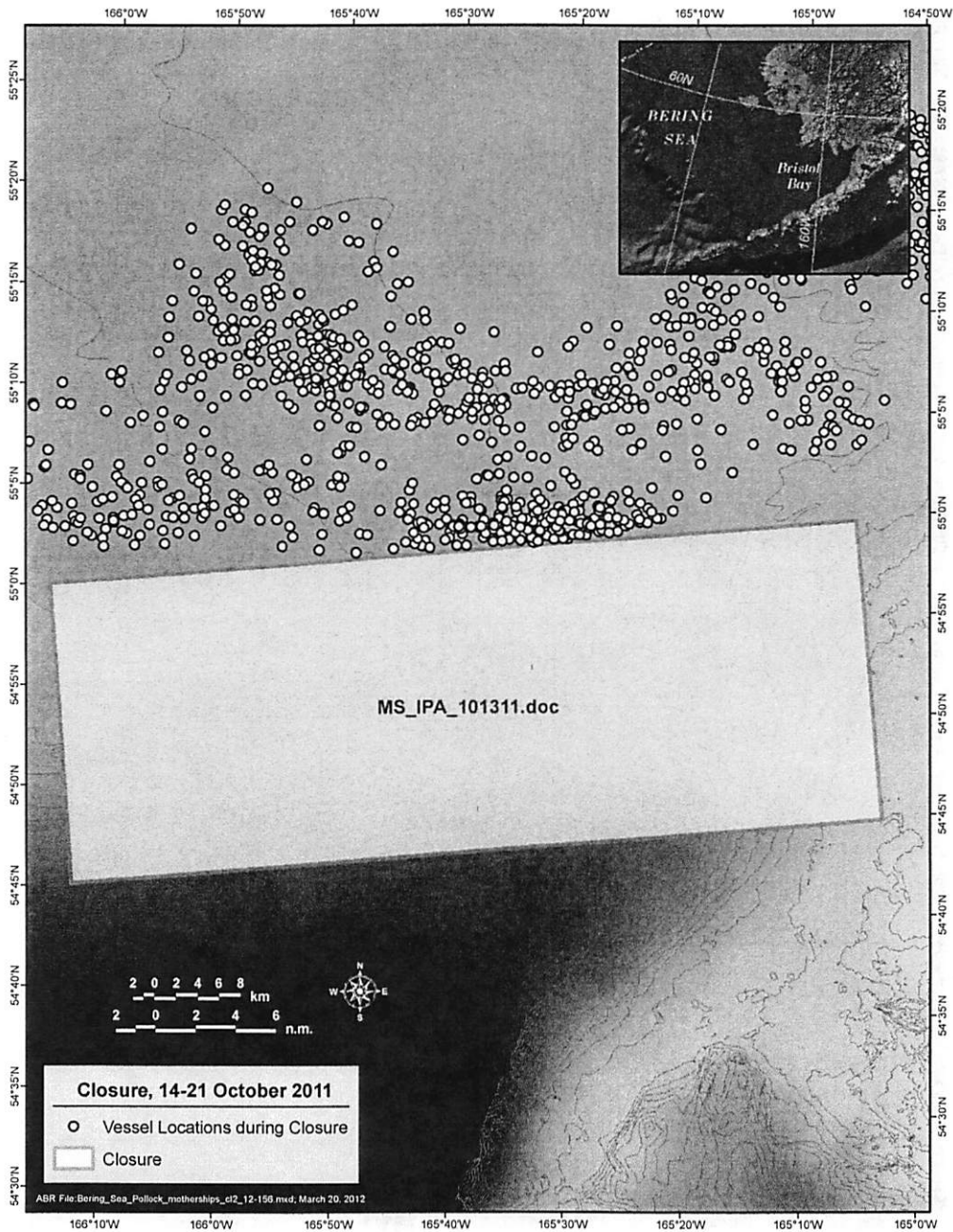


Figure 3: October 14, 2011 Closure

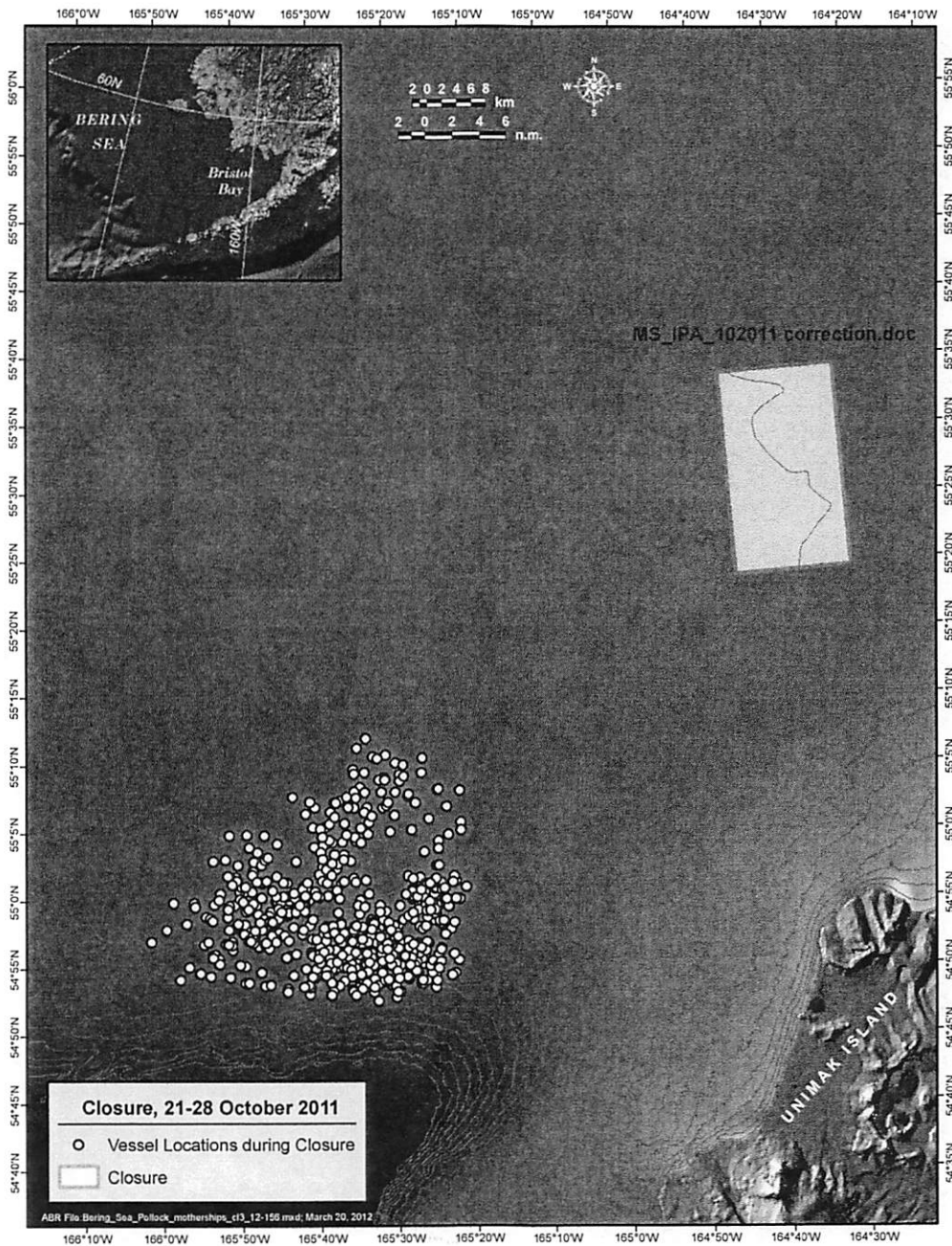


Figure 4: October 21, 2011 Closure



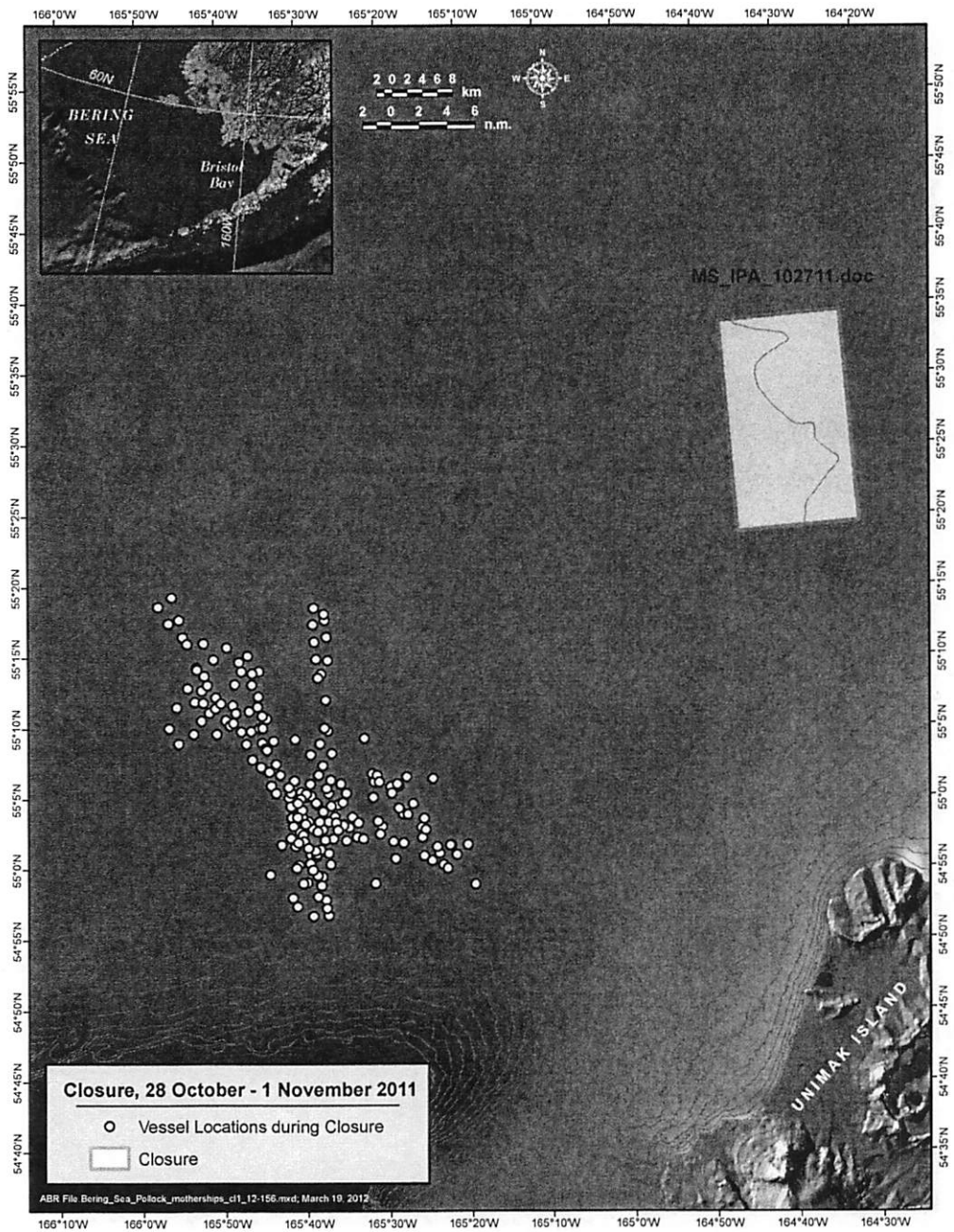


Figure 5: October 28, 2011 Closure

AFA Inshore Cooperatives  
C/o United Catcher Boats Association  
4005 20<sup>th</sup> Ave. West  
Suite 116  
Seattle, Wash. 98199

June 21, 2011

Mr. Glenn Merrill  
National Marine Fisheries Service – Alaska Region  
Sustainable Fisheries Division  
P.O. Box 21668  
Juneau, Alaska, 99802-1668

Dear Mr. Merrill,

Included with this letter is an application for an amended IPA as allowed under the Amendment 91 Regulations. This amended IPA is intended to replace the Inshore Chinook Salmon Savings Incentive Plan Agreement accepted by NMFS on November 5, 2010 (identified as IPA #1). The changes in this amended IPA from the original are as follows:

1. On page 4 the definition at paragraph 1.22 “Trip Specific Transfers” has been changed to allow Trip Specific Transfers to originate from multiple vessels instead of a single vessel as defined in the original IPA.
2. Page 7, paragraph 4.1 “Monitoring and Reporting Salmon Credit Usage” has the following additional language inserted on the end of the final sentence; “...**or as specifically authorized by the authorized representative of the Inshore Sector Cooperatives.**”
3. Page 14, paragraph 9.4 “Vessel Tier Assignments” has been amended to track vessel bycatch rates for the “**prior 2 weeks**” instead of the prior 3 weeks as found in the original IPA. The 3 week period was written in error and should have originally been 2 weeks; a 2 week period is consistent with previous Rolling Hot Spot agreements.
4. Page 15, paragraph 9.6.1 “Savings Area Designation Criteria” has no language changes from the original IPA, but there was an error in the original submission. “Exhibit 2” as referenced in this section was not included in original; that Exhibit 2 is now found at the end of the IPA with the other exhibits. Consequently Exhibits 2 and 3 in the original IPA are now labeled Exhibits 3 and 4.
5. Page 15, paragraph 9.6.2 “Savings Area Boundaries and Limitations” has had the reference to using only the “**A season**” bycatch history from 2000-2009 for Chinook Savings Area closures removed. This removal allows both A and B season bycatch

history to be used in establishing the closure areas. Note that a reference to Exhibit 3 has been added to this paragraph as well.

6. Page 17, paragraph 11.1 "Compliance Agreement" is now referenced to Exhibit 4 as previously mentioned. Also note that all members to this IPA are currently members of inshore cooperatives. The original IPA included 2 participants that were not members of an inshore cooperative in 2010 when the original IPA was submitted, those IPA members, the Northwest Explorer and Leslie Lee, are now members of the Akutan and Unalaska Coops.
7. Page 22, for the reasons mentioned above, the signature page no longer requires individual vessel signatures, only those from the representatives from the six inshore cooperatives, United Catcher Boats, and Sea State.

The Inshore SSIP remains designed to meet each of the 5 required elements under 679.21(f)(12)(iii)(B)(3) found on page 53065 of the final rule.

While there has been changes in coop membership by the original participants, there are no overall membership changes in this amended IPA; 100% of the AFA inshore qualified catcher vessels are still participating in the Inshore SSIP. The Agreement has been signed by the six inshore cooperative representatives on behalf of all their members. Exhibit 3 of the Agreement lists the participating vessels by cooperative.

The Agreement has been signed by the following Inshore Cooperative representatives:

Christian Asay – Akutan Catcher Vessel Association  
Pat Hardina – Northern Victor Fleet Cooperative  
Mike Martin – Peter Pan Fleet Cooperative  
Ken Tippet – Unalaska Fleet Cooperative  
Jeff Hendricks – UniSea Fleet Cooperative  
Robert Dooley – Westward Fleet Cooperative

As noted in the amended IPA I remain the Representative for the Inshore SSIP IPA. My telephone number is (206) 282-2599 and e-mail address is [jgruver@ucba.org](mailto:jgruver@ucba.org).


Thank you for consideration of the Amended Inshore Chinook Salmon Savings Incentive Plan Agreement.

Sincerely,



John F. Gruver  
Inshore SSIP Representative  
United Catcher Boats




<p><b>APPLICATION FOR AN INCENTIVE PLAN AGREEMENT (IPA) AND LIST OF IPA PARTICIPANTS</b></p>	<p>U.S. Dept. of Commerce/NOAA National Marine Fisheries Service (NMFS) Sustainable Fisheries Division P.O. Box 21668 Juneau, AK 99802-1668 Fax: 907-586-7131 Telephone: 907-586-7228</p>	
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<b>TYPE OF APPLICATION</b>
<p>Indicate whether this application is for</p> <p style="text-align: center;"> <input type="checkbox"/> New IPA                      <input checked="" type="checkbox"/> Amended IPA                      <input type="checkbox"/> Change IPA Participant List             </p> <p>NOTE: Attach Incentive Plan Agreement.</p>

<b>BLOCK A – IPA INFORMATION</b>	
<p>1. Name of IPA: Inshore Chinook Salmon Savings Incentive Plan Agreement</p>	<p>2. IPA Number: 1</p>

<b>BLOCK B – IPA CONTACT INFORMATION</b>		
<p>1. Name of IPA's Representative: John F. Gruver</p>	<p>2. Name of Agent for Service of Process, if different from representative Mundt MacGregor LLP</p>	
<p>3. Permanent Business Mailing Address: 4005 20th Ave. West Suite 116 Seattle, WA 98199</p>	<p>4. Temporary Business Mailing Address (if applicable):</p>	
<p>5. Business Telephone No.: (206) 282-2599</p>	<p>6. Business Fax No.: (206) 282-2414</p>	<p>7. E-mail address: jgruver@ucba.org</p>

<b>BLOCK C – AFFIRMATION</b>
<p><input checked="" type="checkbox"/> (Check if Applicable)</p> <p>I claim, swear, and affirm that each eligible vessel owner or CDQ group, from whom I received written notification, requesting to join this IPA has been allowed to join this IPA subject to the same terms and conditions that have been agreed on by, and are applicable to, all other parties to the IPA.</p>

<b>BLOCK D – CERTIFICATION</b>		
<p>Under penalty of perjury, I certify by my signature below that I have examined the information and the claims provided on this application and, to the best of my knowledge and belief, the information presented here is true, correct, and complete.</p>		
<p>1. Printed Name of Representative: John F. Gruver</p>	<p>2. Signature of Representative: </p>	<p>3. Date Signed: June 21, 2011</p>

**BLOCK E – VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Aldebaran	48215	901
Arctic Explorer	57440	3388
Arcturus	45978	533
Blue Fox	62892	4611
Bristol Explorer	55923	3007
Cape Kiwanda	61432	1235
Columbia	39056	1228
Dominator	08668	411
Excalibur II	54653	410
Exodus Explorer	33112	1249
Gladiator	32473	1318
Golden Dawn	35687	1292
Golden Pisces	32817	586
Hazel Lorraine	57117	523
Intrepid Explorer	64105	4993
Lisa Melinda	41520	4506
Majesty	60650	3996
Marcy J	00055	2142
Margaret Lyn (Inshore)	31672	723

**BLOCK E – VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Mark I (Inshore)	06440	1242
Nordic Explorer	51092	3009
Northern Patriot	55153	2769
Northwest Explorer	36808	3002
Ocean Explorer	51073	3011
Pacific Explorer	50759	3010
Pacific Ram	61792	4305
Pacific Viking	00047	422
Pegasus	57149	1265
Peggy Jo	09200	979
Perseverance	12668	2837
Predator	33744	1275
Raven	56395	1236
Royal American	40840	543
Seeker	59476	2849
Sovereignty	55199	2770
Traveler (Inshore)	58821	3404
Viking Explorer	36045	1116
American Eagle	00039	434

**BLOCK E - VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Anita J	00029	1913
Collier Brothers	54648	2791
Commodore	53843	2657
Gold Rush	40309	1868
Half Moon Bay	39230	249
Miss Berdie	59123	3679
Nordic Fury (Inshore)	00200	1094
Ocean Hope 3	48173	1623
Pacific Fury (Inshore)	00033	421
Poseidon	37036	1164
Royal Atlantic	00046	236
Storm Petrel	39860	1641
Sunset Bay	35527	251
AJ	57934	3405
American Beauty (Inshore)	24255	1688
Elizabeth F	14767	823
Ocean Leader (inshore)	00032	1229
Oceanic (Inshore)	03404	1667
Pacific Challenger (Inshore)	06931	657

**BLOCK E – VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Providian	70709	6308
Topaz	40250	405
Walter N	34919	825
Alaska Rose	38989	515
Bering Rose	40638	516
Destination	60655	3988
Great Pacific	37660	511
Leslie Lee	56119	1234
Messiah	66196	6081
Ms. Amy	56164	2904
Progress	00006	512
Sea Wolf	35957	1652
Vanguard (inshore)	39946	519
Western Dawn (Inshore)	22294	134
Alea	40749	2811
Argosy	38547	2810
Auriga	56153	2889
Aurora	56154	2888
Defender	56676	3257

**BLOCK E - VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Fierce Allegiance	55111	4133
Gun-Mar	41312	425
Mar-Gun (Inshore)	12110	524
Morning Star	38431	208
Morning Star	70323	6204
Nordic Star	00961	428
Pacific Monarch	54645	2785
Seadawn	00077	2059
Star Fish	00012	1167
Starlite	34931	1998
Starward	39197	417
Alaskan Command	57321	3391
Alyeska (Inshore)	00045	395
Arctic Wind	01112	5137
Caitlin Ann	59779	3800
Chelsea K	62906	4620
Dona Martita	51672	2047
Hickory Wind	47795	993
Pacific Knight	54643	2783

**BLOCK E – VESSEL IDENTIFICATION**

Attach additional sheet if necessary.

Name of vessel	ADF&G No.	Federal Fisheries Permit No.
Pacific Prince	61450	4194
Viking	00008	1222
Westward I	53247	1650

INSHORE CHINOOK SALMON SAVINGS  
INCENTIVE PLAN AGREEMENT  
AMENDED June 2, 2011

This Amended INSHORE CHINOOK SALMON SAVINGS INCENTIVE PLAN AGREEMENT is entered into by and among AKUTAN CATCHER VESSEL ASSOCIATION, NORTHERN VICTOR FLEET COOPERATIVE, PETER PAN FLEET COOPERATIVE, UNALASKA FLEET COOPERATIVE, UNISEA FLEET COOPERATIVE, WESTWARD FLEET COOPERATIVE (together, the "Inshore Sector Cooperatives"), UNITED CATCHER BOATS ("UCB"), and SEA STATE, INC. ("Sea State") as of June 2, 2011, with respect to the following facts:

RECITALS

A. The North Pacific Fishery Management Council has adopted Amendment 91 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area ("Amendment 91"). Under Amendment 91, Community Development Quota ("CDQ") organizations and individuals or entities that own a vessel that is permitted under the American Fisheries Act to harvest pollock in the Bering Sea directed pollock fishery may enter into any "incentive plan agreement" ("IPA") approved by the National Marine Fisheries Service ("NMFS") that implements incentives for the operator of each vessel participating in the IPA to avoid Chinook salmon bycatch under any conditions of pollock and Chinook salmon abundance in all years.

B. The Inshore Sector Cooperatives have elected to prepare and submit this Agreement as their IPA, which they are entering into on behalf of the vessel owners and vessels that are their members.

AGREEMENT

1. Definitions. The following terms shall have the following meanings when used in this Agreement.

1.1 Annual Threshold Amount. The "Annual Threshold Amount" is the annual number of Chinook salmon allocated to the members of a Bering Sea pollock fishery sector or to Bering Sea CDQ organizations that participate in an IPA pursuant to the regulations implementing Amendment 91, calculated with reference to a 47,591 Chinook salmon "Prohibited Species Catch" ("PSC") limit.

1.2 Annual Vessel Percentage. The "Annual Vessel Percentage" is each Vessel's, Opt-In Vessel's, or CDQ Vessel's percentage share of its pollock fishery sector's Annual Threshold Amount. Each Vessel's Annual Vessel Percentage is calculated by adding together the "Percent[s]" assigned to all of the Vessels in Column D of Table 47c to 50 CFR 679 (each, a "Percent", together, the "Percents"), and then dividing the individual Vessel's Percent by the total Percent amount that is the product of that addition. Each Opt-In Vessel's Annual Vessel Percentage is calculated by using the same method, with reference to Table 47a to 50 CFR Part 679 for an Opt-In Vessel that is a catcher/processor, and Table 47b to 50 CFR Part 670 for an Opt-In Vessel that is a mothership sector catcher vessel. Each CDQ Vessel's Percentage shall be the percentage assigned to it by the CDQ organization for which it is harvesting pollock, as communicated by such organization to the Manager (as defined in Section 15, below) and the Monitoring Agent (as defined in Section 16, below), subject to the CDQ organization "Percents" set forth on Table 47d to 50 CFR 679. References to Tables 47a, 47b, 47c and 47d shall be to such Tables as they are amended from time to time.



**1.3 Annual Use Limit.** The "Annual Use Limit" is (i) each Vessel's share of the annual Chinook salmon PSC limit for the Bering Sea pollock fishery inshore sector, net of any Insurance Pool deductions made pursuant to Section 3, below; (ii) each Opt-In Vessel's share of the annual Chinook salmon PSC limit for the Bering Sea pollock fishery sector, other than the inshore sector, in which the Opt-In Vessel is eligible to participate; and (iii) each CDQ Vessel's share of the annual Chinook salmon PSC assigned to the CDQ organization whose pollock allocation it is harvesting, as determined by that CDQ organization and communicated to the Manager and the Monitoring Agent. Each Vessel's Annual Use Limit is calculated by adding the Vessel Percents for all of the Vessels in the Cooperative of which such Vessel is a member, dividing such Vessel's Percent by the total Percent amount that is the product of that addition, multiplying the Cooperative Hard Cap for the Cooperative of which the Vessel is a member by the product of that division, and then deducting all Insurance Pool repayments and usage assessments charged to such Vessel during the relevant fishing year. Each Opt-In Vessel's Annual Use Limit is the amount of Chinook salmon PSC that the Opt-In Vessel is limited to using during the relevant fishing year by the Chinook salmon bycatch "entity" of which it is a member. Each CDQ Vessel's Annual Use Limit is the amount of Chinook salmon PSC that the CDQ Vessel is limited to using during the relevant fishing year by the CDQ organization for which it is harvesting CDQ pollock under the terms of this Agreement. Notwithstanding the foregoing provisions of this Section 1.3, a Vessel's Annual Use Limit shall be increased by an "inter-entity" transfer to the Inshore Sector Cooperative of which such Vessel is a member made for the benefit of that Vessel in accordance with this Agreement.

**1.4 Available Credit Limit.** Each Vessel's, Opt-In Vessel's and CDQ Vessel's "Available Credit Limit" is the lesser of (i) the remaining balance of its annual Base Cap Credits and Salmon Savings Credits in its account, or (ii) its Annual Use Limit.

**1.5 Available Cap Credits.** Each Vessel's, Opt-In Vessel's and CDQ Vessel's "Available Cap Credits" are the amount of the Vessel's, Opt-In Vessel's or CDQ Vessel's unused Salmon Credits that such Vessel may use, subject to its Available Credit Limit.

**1.6 Base Cap Credits.** "Base Cap Credits" are units of Bering Sea Chinook salmon PSC bycatch that are annually allocated to Vessels, Opt-In Vessels and CDQ Vessels under Section 3 of this Agreement.

**1.7 Base Cap Credit Allocation.** A Vessel's "Base Cap Credit Allocation" is that Vessel's annual allocation of Base Cap Credits, as adjusted by Base Cap Credit transfers made in accordance with this Agreement. Each Vessel's, Opt-In Vessel's and CDQ Vessel's Base Cap Credit Allocation is such Vessel's share of the Annual Threshold Amount, as calculated and adjusted by the Manager in accordance with Section 3 of this Agreement, and as further adjusted by Base Cap Credit transfers made in accordance with this Agreement.

**1.8 Blended Paired Transfers.** "Blended Paired Transfers" are transfers of Salmon Credits and pollock harvest share into a transferee vessel's account by one or more transferor vessels, which are "blended" with all other Salmon Credits and pollock harvest share assigned to the transferee vessel.

**1.9 CDQ Vessels.** CDQ Vessels are vessels that harvest Bering Sea pollock allocated to one of the CDQ groups identified on Table 47d to 50 CFR 679 which have opted to participate in the

Chinook salmon bycatch avoidance IPA implemented under this Agreement in accordance with the regulations implementing Amendment 91. A Vessel or Opt-In Vessel that harvests pollock allocated to a CDQ organization shall be deemed a CDQ Vessel in connection with each trawl tow during which it does so. Pursuant to Section 11, below, the individual(s) or entity or entities that own a CDQ Vessel and the CDQ organization whose pollock allocation the CDQ Vessel is harvesting shall be deemed to assume all legal responsibility and liability associated with such CDQ Vessel's obligations under this Agreement.

**1.10 Cooperatives.** The "Cooperatives" are collectively the Inshore Sector Cooperatives and the Virtual Cooperative. Each of the Cooperatives is referred to individually as a "Cooperative".

**1.11 Cooperative Hard Cap.** "Cooperative Hard Cap" is (i) for Inshore Sector Cooperatives, the annual amount of Chinook salmon PSC that NMFS allocates to that Inshore Sector Cooperative, and (ii) for the Virtual Cooperative, the sum of (a) the annual amount of Chinook salmon PSC allocated to Vessels participating in the inshore sector "open access" fishery, (b) the sum of the Opt-In Vessels' Annual Use Limits, and (c) the sum of the CDQ Vessels' Annual Use Limits.

**1.12 Hardship Transfer.** A "Hardship Transfer" is a Paired Transfer from a vessel that is unable to complete its pollock harvest for a season as the result of mechanical breakdown, collision, grounding or comparable event outside of the vessel owner's control, to one or more vessels that harvest the disabled vessel's Cooperative pollock harvest share for that season.

**1.13 Inshore Sector Cooperative.** An "Inshore Sector Cooperative" is an American Fisheries Act ("AFA") Bering Sea pollock fishery inshore sector cooperative that is recognized as such by NMFS under the regulations implementing Amendment 91 and that is a party to this Agreement.

**1.14 Insurance Pool.** The "Insurance Pool" is a pool of Base Cap Credits funded by deducting Base Cap Credits from the Inshore Sector Cooperative Vessels' annual Base Cap Credit Allocations. The Insurance Pool is used to cover Chinook salmon PSC bycatch by Inshore Sector Cooperative Vessels that exceed their Available Credit Limit. The Insurance Pool is not available to Vessels in the Virtual Cooperative.

**1.15 Mop-Up Transfers.** "Mop-Up Transfers" are Paired Transfers by one or more Vessels in an Inshore Sector Cooperative to a single Vessel in the same Inshore Sector Cooperative to enable the transferee Vessel to complete a Cooperative's seasonal pollock harvest on behalf of all of the Inshore Sector Cooperative's members.

**1.16 Opt-In Vessels.** "Opt-In Vessels" are vessels that are eligible to harvest pollock from the Bering Sea pollock fishery mothership sector or catcher/processor sector allocation under the AFA, which have opted to participate in the Chinook salmon bycatch avoidance IPA implemented under this Agreement in accordance with the regulations implementing Amendment 91. A Vessel that is qualified to harvest pollock from both the inshore and mothership sectors of the Bering Sea pollock fishery shall be deemed a Vessel for purposes of its fishing activity as a member of an Inshore Sector Cooperative under this Agreement, and shall be deemed an Opt-In Vessel for purposes of its harvest of pollock from the mothership sector allocation under this Agreement. Pursuant to Section 11, below, the individual(s) or entity or entities that own an Opt-In Vessel shall be deemed to assume all legal responsibility and liability associated with such Opt-In Vessel's obligations under this Agreement.

**1.17 Paired Transfers.** "Paired Transfers" are simultaneous transfers of Salmon Credits and Cooperative pollock harvest share between two or more vessels in the same Cooperative, including Vessels that are deemed to be members of the same Cooperative pursuant to an Amendment 69 fishing agreement. There are four types of Paired Transfers: "Blended Paired Transfers", "Hardship Transfers", "Mop-Up Transfers" and "Trip-Specific Paired Transfers". Paired Transfers are not permitted between vessels in different Bering Sea pollock fishery sectors, between a non-CDQ Vessel and a CDQ Vessel, or between two CDQ Vessels fishing for different CDQ organizations. However, Paired Transfers may be made between Vessels in the Virtual Cooperative, if pollock harvest shares have been allocated between or among Vessels in the Virtual Cooperative.

**1.18 Salmon Credits.** Each "Salmon Credit" is equal to one Chinook salmon that the holder is eligible to take as PSC bycatch in the Bering Sea directed pollock fishery, subject to the terms and conditions of this Agreement. Salmon Credits are annually allocated as Base Cap Credits, and can be earned as Salmon Savings Credits. Inter-"entity" transfers of salmon bycatch units into an Inshore Sector Cooperative, Vessel, Opt-In Vessel or CDQ Vessel account from another Bering Sea pollock fishery sector or a CDQ organization shall become Salmon Credits upon completion of the transfer.

**1.19 Salmon Savings Credits.** "Salmon Savings Credits" are Salmon Credits that Vessels, Opt-In Vessels or CDQ Vessels earn by catching less Bering Sea Chinook salmon while participating in the Bering Sea directed pollock fishery during a particular year than the amount of Salmon Credits that the Vessel, Opt-In Vessel or CDQ Vessel receives as its Base Cap Credit Allocation for that year, as calculated in accordance with Section 4 of this Agreement.

**1.20 Seasonal Hard Cap Amount.** "Seasonal Hard Cap Amount" is the annual amount of Chinook salmon PSC which the Vessels, Opt-In Vessels or CDQ Vessels in a Cooperative are prohibited by regulation from exceeding during the relevant Bering Sea pollock fishery season. NMFS will assign an annual "A" season Seasonal Hard Cap Amount and an annual "B" season Seasonal Hard Cap Amount to each Inshore Sector Cooperative, pursuant to 50 CFR 679.21(f). The Manager shall calculate the Seasonal Hard Cap Amounts for the Vessels, Opt-In Vessels and CDQ Vessels in the Virtual Cooperative.

**1.21 Transfer Tax.** "Transfer Tax" is the tax applied to all Base Cap Credits in excess of twenty-seven (27) that a Vessel receives during a pollock fishing season, as calculated in accordance with the "Transfer Tax Schedule" attached as Exhibit 1, other than those transfers which are specifically exempted from application of the Transfer Tax under the terms of this Agreement.

**1.22 Trip-Specific Paired Transfers.** "Trip Specific Paired Transfers" are Paired Transfers originating from one or more Vessel(s) to a single harvesting Vessel during a fishing trip. A portion of the trip may be assigned to the harvesting Vessel as well as to the transferor Vessel(s).

**1.23 Vessels.** "Vessels" are the catcher vessels eligible to harvest pollock from the Bering Sea pollock fishery inshore sector allocation under the AFA that are (i) either assigned to a Cooperative or fishing in the inshore sector "open access" fishery and (ii) participating in the Chinook salmon PSC savings IPA implemented by this Agreement. Pursuant to Section 11, below, the individual(s) or entity or entities that own a Vessel shall be deemed to assume all legal responsibility and liability associated with such Vessel's obligations under this Agreement.

1.23 Virtual Cooperative. "Virtual Cooperative" means the group composed of the Vessels that are fishing in the inshore sector "open access" fishery during a given year, the Opt-In Vessels and the CDQ Vessels. For purposes of this Agreement, such group shall be treated as an association with certain rights and obligations among its members as provided under this Agreement, even though it is not organized as such.

2. Agreement Summary. The vessels participating in this IPA receive an annual allocation of Chinook salmon bycatch units, which limits their Chinook salmon PSC bycatch to their pro-rata share of the 47,591 Chinook salmon PSC performance standard, less Insurance Pool deductions for Inshore Cooperative Vessels. A vessel can earn additional Chinook bycatch units by catching fewer Chinook salmon PSC as bycatch than the amount of its annual allocation, at a rate of one (1) additional unit for every three (3) allocated units that are not used. The Insurance Pool is a Chinook bycatch unit reserve, which is available to Inshore Sector Cooperative Vessels whose Chinook bycatch exceeds the number of bycatch units they hold. Inshore Sector Cooperative Vessels using Insurance Pool bycatch units are required to repay the Insurance Pool, and to pay an additional Insurance Pool usage penalty. If the inshore sector's Chinook salmon bycatch exceeds its performance standard for two (2) years in a six (6) consecutive year period, each Cooperative is required to take all actions necessary to insure that the Chinook salmon bycatch of its Vessels does not exceed the Annual Threshold Amount for a third (3<sup>rd</sup>) year in a seven (7) consecutive year period. A rolling hot spot closure program closes areas of relatively high Chinook salmon PSC bycatch to vessels that have relatively high rates of Chinook salmon bycatch during periods when the vessels participating in this IPA are experiencing relatively low levels of Chinook salmon encounter.

3. Base Cap Credit Allocations. All Base Cap Credit Allocations shall be made by the Manager in accordance with this Section 3. All Vessel, Opt-In Vessel and CDQ Vessel Base Cap Credit Allocation amounts shall be calculated to the closest 10<sup>th</sup> of one percent, but all allocations shall be made in the closest round number. Base Cap Credits may only be used or transferred during the calendar year for which they are allocated. Unused Base Cap Credits expire at the end of each calendar year for which they are allocated.

3.1 Base Cap Credit Calculation. Each Vessel, Opt-In Vessel and CDQ Vessel shall receive an initial annual Base Cap Credit Allocation calculated by multiplying the Annual Threshold Amount by that Vessel's, Opt-In Vessel's or CDQ Vessel's Annual Vessel Percentage.

3.2 Seasonal Apportionments. Each Vessel's, Opt-In Vessel's and CDQ Vessel's initial Base Cap Credit Allocation shall be apportioned by season.

3.2.1 Inshore Cooperative Vessels. Each Inshore Sector Cooperative shall assign each Vessel in that Cooperative an "A" season Base Cap Credit Amount and a "B" season Base Cap Credit Amount, as determined by the Inshore Sector Cooperative, provided that: (i) the sum of a Vessel's "A" season apportionment and its "B" season apportionment shall not exceed the Vessel's Annual Base Cap Credit Allocation; (ii) the sum of an Inshore Sector Cooperative's "A" season Base Cap Credit Allocation apportionments among its Vessels shall not exceed that Inshore Sector Cooperative's "A" season Seasonal Hard Cap amount; and (iii) the sum of an Inshore Sector Cooperative's "B" season Base Cap Credit Allocation apportionments among its Vessels shall not exceed the difference between the sum of the Base Cap Credit Allocations for that Inshore Sector Cooperative's Vessels and the sum of that Inshore Sector Cooperative's "A" season Base Cap Credit Allocation apportionments. Each Inshore

Sector Cooperative shall complete the seasonal apportionment assignments for its Vessels and notify the Manager of those assignments in writing on or before January 10 of the year during which such seasonal apportionments are in effect.

**3.2.2 Virtual Cooperative Vessels.** The Manager shall calculate the annual seasonal apportionments of the Base Cap Credit Allocations of Vessels in the Virtual Cooperative by apportioning the "open access" pool "A" season Seasonal Hard Cap and "B" season Base Cap Credit amounts among such Vessels pro rata, on the basis of their Annual Vessel Percentage. Each Opt-In Vessel shall be subject to the annual seasonal apportionments imposed by the Chinook salmon PSC "entity" of which such Opt-In Vessel is a member. Each CDQ Vessel shall be subject to the annual seasonal apportionments imposed by the CDQ organization for which such vessel is harvesting Bering Sea pollock.

**3.3 Insurance Pool Repayment and Usage Assessment Deductions.** Each Inshore Sector Cooperative shall report the amount of Insurance Pool credits used by its Vessels in the prior "A" season by May 1 each year, and shall report the number of Insurance Pool credits used by its Vessels in the prior "B" season by December 1 each year. The Manager shall reduce the Base Cap Credit Allocation of each Vessel by the amount of Insurance Pool credits that the Vessel used in the prior season and did not repay in accordance with Section 7, below. The Manager shall next reduce the Base Cap Credit Allocation of each Vessel that used Insurance Pool credits in the prior season by that Vessel's Insurance Pool usage assessment amount, as calculated in accordance with Section 7, below. If a Vessel does not have a sufficient Base Cap Credit Allocation to cover its Insurance Pool repayment and usage assessment obligations, the Manager shall reduce the Vessel's Base Cap Credit Allocation for the next season to "0", and the Vessel's shortfall shall be carried over to the following season(s) until repaid in full. The Manager shall credit all Insurance Pool repayment and usage assessments reducing the annual Base Cap Credit Allocations of Inshore Sector Cooperative Vessels to the next season's Insurance Pool.

**3.4 Insurance Pool "Top Off" Deductions.** If the Insurance Pool repayment and usage assessment deductions made by the Manager result in an Insurance Pool credit balance which is equal to or greater than an amount equal to the product of multiplying 1,000 by the sum of all Inshore Sector Cooperative Vessels' Annual Vessel Percentages (the "Insurance Pool Target Amount"), the Manager shall not make any further Base Cap Credit Allocation deductions to fund the Insurance Pool. However, if the Insurance Pool repayment and usage assessment deductions result in an Insurance Pool credit balance that is less than the Insurance Pool Target Amount, the Manager shall deduct from the Inshore Sector Cooperative Vessels' Base Cap Credit Allocations the additional amount necessary to fund the Insurance Pool to the Insurance Pool Target amount. Each Inshore Sector Vessel's contribution to such additional deduction shall be calculated by multiplying the Vessel's Annual Vessel Percentage by the difference between the Insurance Pool credit balance after making the prior season's repayment and usage assessment deposits and the Insurance Pool Target Amount.

**4. Salmon Savings Credit Allocations.** A Vessel, Opt-In Vessel or CDQ Vessel that catches an amount of Chinook salmon PSC in the Bering Sea pollock fishery during a calendar year that is less than its Base Cap Credit Allocation for that year shall earn Salmon Savings Credits in accordance with the terms of this Section 4. In addition, a Vessel that has some or all of its Cooperative harvest share for the Bering Sea pollock fishery harvested by one or more other Vessels shall earn Salmon Savings Credits in accordance with the terms of this Section 4 if the harvesting Vessel(s) catch an amount of Chinook

salmon that is less than the Base Cap Credit amount assigned to the harvesting Vessels by the non-harvesting Vessel, while harvesting the assigned harvest share.

4.1 Monitoring and Reporting Salmon Credit Usage. For purposes of this Section 4.1, Salmon Credit usage shall mean, for each delivery of pollock and associated Chinook salmon PSC, the allocation of the full amount of that Chinook salmon PSC to an identified vessel or vessels in accordance with this Agreement, such that their Available Cap Credits are reduced by that Chinook salmon PSC. Each Inshore Sector Cooperative shall monitor the Salmon Credit usage of its Vessels, and shall make such information available to the Manager and the Monitoring Agent on a trip-by-trip basis, within forty eight (48) hours of the date on which the related Alaska Department of Fish and Game ("ADF&G") fish ticket is completed. The Manager or the Monitoring Agent shall make all such information available to the members of all Inshore Sector Cooperatives that are parties to this Agreement. Further, each Inshore Sector Cooperative shall have until May 1, for the prior "A" season, and until December 1, for the prior "B" season to report and resolve any in-season reporting discrepancies with the Manager. The Manager shall monitor the Salmon Credit usage of the Vessels, Opt-In Vessels, and CDQ Vessels in the Virtual Cooperative. Because transparency is necessary to assure uniform implementation of this Agreement by the Cooperatives and to monitor the relative performance of the Cooperatives in relation to the Annual Threshold amount, all information the Manager in his or her sole discretion deems necessary to verify the same shall be provided by the Cooperatives to the Manager and/or Monitoring Agent promptly upon the Manager's request, and shall be available to all parties to this Agreement. Subject to the foregoing, all information reported to the Manager and/or the Monitoring Agent pursuant to this Section 4.1 shall be treated as confidential, and shall not be disclosed to individuals or entities other than the authorized representatives and members of the Inshore Sector Cooperatives, except as required by the regulations implementing Amendment 91 or as specifically authorized by the authorized representatives of the Inshore Sector Cooperatives.

4.2 Salmon Savings Credit Calculation. For every three (3) annual Base Cap Credits that a Vessel, Opt-In Vessel or CDQ Vessel does not use during the year they are allocated to it, such Vessel, Opt-In Vessel or CDQ Vessel shall receive one (1) Salmon Savings Credit. For purposes of calculating Salmon Savings Credits under this Section 4.2, Base Cap Credits a Vessel transfers to another Vessel shall generate Salmon Savings Credits for the transferor Vessel. The Manager shall maintain a Salmon Savings Credit account for each Vessel, Opt-In Vessel and CDQ Vessel, and shall calculate and assign Salmon Savings Credits to each Vessel's, Opt-In Vessel's and CDQ Vessel's account at the end of each fishing year. If a Vessel's, Opt-In Vessel's or CDQ Vessel's resulting account balance contains a fraction of a Salmon Savings Credit equal to or greater than one-half, the account balance shall be rounded up to the next whole number.

4.3 Salmon Savings Credit Account Balances. There is no limit on the amount of Salmon Savings Credits a Vessel, Opt-In Vessel or CDQ Vessel may have in its Salmon Savings Credit account.

4.4 Salmon Savings Credit Duration. Salmon Savings Credits shall last for five (5) calendar years.

5. Restrictions on Salmon Credit Usage. No Salmon Credit shall be used other than in strict compliance with the terms and conditions of this Section 5. All other attempted use of Salmon Credits shall be void and have no effect. Salmon Credit transfers are governed by the provisions of Section 6, below.

5.1 Available Cap Credit Usage. No Vessel, Opt-in Vessel or CDQ Vessel shall use an amount of Salmon Credits in excess of its Available Credit Limit. No Cooperative shall permit a Vessel, Opt-In Vessel or CDQ Vessel that is a member of such Cooperative to exceed its Available Credit Limit.

5.2 Salmon Savings Credit Usage. No Vessel, Opt-In Vessel or CDQ Vessel shall use Salmon Savings Credits other than in strict compliance with this Section 5.2.

5.2.1 Salmon Savings Credits shall only be used by a Vessel, Opt-In Vessel or CDQ Vessel after such vessel has used all of its Base Cap Credits.

5.2.2 Vessels, Opt-In Vessels or CDQ Vessels that transfer more than five (5) Base Cap Credits to another Vessel, Opt-In Vessel or CDQ Vessel during a calendar year shall not use Salmon Savings Credits during the same calendar year.

5.2.3 No Vessel shall use Salmon Savings Credits during the "A" season.

5.2.4 If used, Salmon Savings Credits shall be deducted from a Vessel's, Opt-In Vessel's or CDQ Vessel's account on a "first-in, first-out" basis.

6. Salmon Credit Transfers. No Salmon Credit shall be transferred from the Vessel, Opt-In Vessel or CDQ Vessel to which it is allocated or the Vessel, Opt-In Vessel or CDQ Vessel Salmon Savings Credit account to which it is assigned by the Manager other than in strict compliance with this Section 6. All other attempted transfers of Salmon Credits shall be void and have no effect. No Salmon Credit transfer shall be made in violation of the regulations implementing Amendment 91.

6.1 Base Cap Credit Transfers. Base Cap Credits may only be transferred between Vessels, Opt-In Vessels and CDQ Vessels that are participating in the Chinook salmon PSC savings IPA that is implemented under this Agreement, and only in strict compliance with the terms and conditions of this Agreement.

6.2 Transfer Tax. All Base Cap Credit transfers other than those specifically exempted under this Section 6 are subject to the Transfer Tax, as defined in Section 1.21, above. When a Base Cap Credit transfer is subject to the Transfer Tax, the transferee Vessel shall receive a number of Base Cap Credits calculated by multiplying the number of Base Cap Credits acquired from the transferor Vessel by the applicable percentage reflected on Exhibit 1, and deducting the product from the number of Base Cap Credits acquired from the transferor. The Base Cap Credits that are deducted from a transfer as a result of applying the Transfer Tax shall be nullified, and shall not be available for use by the transferor or the transferee.

6.3 Base Cap Credit Transfers Without Accompanying Pollock Harvest Share Transfers. Base Cap Credits may be transferred from any Inshore Sector Cooperative Vessel to any other Inshore Sector Cooperative Vessel on such terms as the owners of the transferor Vessel and the transferee Vessel agree, provided that no such Base Cap Credit transfer shall take effect unless and until the Manager has been informed of and approved the proposed transfer. Base Cap Credits may be transferred between Vessels in the Virtual Cooperative and between Opt-In Vessels from the same pollock fishery sector on such terms as the owners of the transferor Virtual Cooperative Vessel or Opt-In

Vessel and the transferee Virtual Cooperative Vessel or Opt-In Vessel agree, provided that no such Base Cap Credit transfer shall take effect unless and until the Manager has been informed of and approved the proposed transfer. Base Cap Credits may be transferred between CDQ Vessels harvesting pollock for the same CDQ organization on such terms as the affected CDQ organization and owners of CDQ Vessels may agree, provided that no such Base Cap Credit transfer shall take effect unless and until the Manager has been informed of and approved the proposed transfer. If the transferee and transferor Vessels are each in an Inshore Sector Cooperative, the Manager shall not approve the transfer until the authorized representatives of the Inshore Cooperative(s) involved have been informed of and approved the transfer.

6.3.1 No Vessel, Opt-In Vessel or CDQ Vessel shall receive an amount of Base Cap Credits by transfer such that the sum of Salmon Credits allocated to, earned by and transferred to the Vessel, Opt-In Vessel or CDQ Vessel in a particular calendar year exceeds the Vessel's, Opt-In Vessel's or CDQ Vessel's Annual Use Limit for that calendar year.

6.3.2 A Vessel may exchange its "A" season Base Cap Credits for an equal amount of another Vessel's "B" season Base Cap credits and vice versa, on such terms as such Vessels may agree upon in their sole discretion. Such reciprocal exchanges of seasonally apportioned Base Cap Credits shall not be subject to the Transfer Tax.

6.3.3 An Inshore Sector Cooperative Vessel may obtain Salmon Credits to reduce or avoid Insurance Pool deductions and assessments. Such transfers shall be subject to the Transfer Tax, if applicable.

6.4 Paired Transfers. Subject to the terms and conditions set forth in this Section 6.4: (i) a Vessel in an Inshore Sector Cooperative may make Paired Transfers to one or more other Vessels that are members of the same Inshore Sector Cooperative, or harvesting from the same Inshore Sector Cooperative's annual allocation under an Amendment 69 contract; (ii) a Vessel in the Virtual Cooperative may make Paired Transfers to one or more other Vessels in the Virtual Cooperative, if pollock harvest shares have been allocated between or among Vessels in the Virtual Cooperative; (iii) an Opt-In Vessel may make Paired Transfers to one or more other Opt-In Vessels from the same pollock fishery sector; and (iv) a CDQ Vessel may make a Paired Transfer to another CDQ Vessel fishing for the same CDQ organization. Paired Transfers made in accordance with the provisions of this Section 6.4 are not subject to the Transfer Tax, and the Base Cap Credits transferred as part of a Paired Transfer do not count towards the 27 credits exempted from a Transfer Tax. All Chinook salmon PSC catch taken by a transferee vessel under a Paired Transfer shall be accounted for under the transferor vessel's Annual Use Limit, and not under the transferee vessel's Annual Use Limit.

6.4.1. Salmon Credit Transfer Ratios. Unless the provisions of Sections 6.4.1.1 or 6.4.1.2, below, apply, a Blended Paired Transfer's ratio of Salmon Credits to pollock tonnage shall not exceed the transferor's pre-harvest ratio of Salmon Credits to pollock tonnage for the season in connection with which the transfer is made. For example, if the transferor Vessel's Available Credit Limit for a pollock "B" season is 50 Salmon Credits, and the transferor Vessel's pollock harvest share for that "B" season is 500 metric tons, the number of Salmon Credits transferred per metric ton of pollock transferred in connection with a Blended Paired Transfer shall not exceed 0.10. The provisions of this Section 6.4.1 do not apply to Trip-Specific Paired Transfers, Hardship Transfers and Mop-Up Transfers.



6.4.1.1 Notwithstanding the provisions of Section 6.4.1, above, if the weekly inshore sector rate of Chinook salmon per metric ton of pollock is greater than the transferor Vessel's or Opt-In Vessel's pre-harvest ratio for that season, the transferor Vessel or Opt-In Vessel may make a Blended Paired Transfer of Salmon Credits per metric ton of pollock in an amount not to exceed the weekly inshore sector's Chinook bycatch rate.

6.4.1.2 Notwithstanding the provisions of Section 6.4.1, above, because Chinook salmon bycatch rates typically increase during the latter part of the "B" season, if a Blended Paired Transfer is made on or after September 15, the transferor Vessel or Opt-In Vessel may transfer Salmon credits per metric ton of pollock at the higher of (i) the then-current weekly inshore sector rate of Chinook salmon per metric ton of pollock, or (ii) the following rates per period: September 15 through September 30, 0.108 Credit per metric ton; October 1 through October 14, 0.312 Credit per metric ton; October 15 through November 1, 0.489 Credit per metric ton.

6.4.2 Blended Paired Transfers. Each transferor vessel that transfers Salmon Credits and Cooperative pollock share to a transferee vessel for harvest as part of a Blended Paired Transfer shall bear a pro rata share of the transferee vessel's Salmon Credit usage and Salmon Savings Credits earned (if any), calculated with reference to the amount of Salmon Credits transferred to the transferee vessel, and an equivalent pro rata share of any related Insurance Pool usage and all related deductions and assessments related to the transferee vessel's harvest of the pollock transferred in connection with the Blended Paired Transfer(s), provided that nothing in this Section 6.4.2 shall prevent the parties to a Blended Paired Transfer from allocating responsibility for such Salmon Credit Usage, Salmon Savings Credits earned and Insurance Pool usage and assessments among them otherwise by private agreement.

6.4.3 Trip-Specific Paired Transfers. In connection with a Trip-Specific Paired Transfer, all related Salmon Credit usage, all Salmon Savings Credits earned (if any), and all Insurance Pool usage and all related deductions and assessments shall be attributed to the transferor's account, provided that nothing in this Section 6.4.3 shall prevent the parties to a Trip-Specific Paired Transfer from allocating responsibility for such Salmon Credit Usage, Salmon Savings Credits earned and Insurance Pool usage and assessments among them otherwise by private agreement. Trip-Specific Paired Transfers are not subject to the ratio restrictions of Section 6.4.1, above.

6.4.4 Hardship Transfers. Notwithstanding the provisions of this Section 6 to the contrary, a vessel making a Hardship Transfer may transfer all of its Available Cap Credits and all of its Cooperative pollock harvest share to one or more other vessels. However, the transferee vessel(s) shall not use any of the transferor vessel's Salmon Savings Credits received in a Hardship Transfer in connection with harvests of any pollock other than the pollock harvested in connection with the Hardship Transfer. Hardship Transfers are not subject to the ratio restrictions of Section 6.4.1, above.

6.4.5 Mop-Up Transfers. Notwithstanding the provisions of this Section 6 to the contrary, Vessels making a Mop-Up Transfer may transfer all of their Available Cap Credits and all of their remaining Inshore Sector Cooperative pollock harvest share for a season to the Vessel conducting the Inshore Sector Cooperative's "mop-up" harvests. In connection with a Mop-Up Transfer, all related Salmon Credit usage, all Salmon Savings Credits earned (if any), and all Insurance Pool usage and all related deductions and assessments shall be attributed to the transferor Vessels' accounts pro-rata, according to the Salmon Credits each of them transfers to the transferee Vessel, provided that nothing

in this Section 6.4.5 shall prevent the parties to a Mop-Up Transfer from allocating responsibility for such Salmon Credit Usage, Salmon Savings Credits earned and Insurance Pool usage and assessments among them otherwise by private agreement. Mop-Up Transfers are not subject to the ratio restrictions of Section 6.4.1, above.

**6.5 Inter-Sector Transfers.** The regulations implementing Amendment 91 permit transfers of Chinook salmon PSC bycatch units issued to "entities" between Bering Sea pollock fishery sectors. However, inter-sector transfers of salmon bycatch units do not change a sector's Annual Threshold Amount. Therefore, salmon bycatch units transferred to an Inshore Sector Cooperative from another fishery sector, if used, could increase the risk of the inshore sector's Chinook salmon PSC bycatch exceeding its Annual Threshold Amount. Therefore, no inter-sector transfers of Chinook salmon PSC bycatch units shall be made to a Cooperative other than in strict compliance with this Section 6.5. All other attempted transfers shall be void and have no effect.

**6.5.1** An Inshore Sector Cooperative may receive a post-delivery inter-sector transfer of Chinook salmon PSC bycatch units to cover Chinook salmon PSC bycatch by a Vessel that causes a Cooperative to exceed the seasonal or annual bycatch limits imposed on the Cooperative under the regulations implementing Amendment 91, provided that the transfer is accomplished in compliance with the regulations governing such post-delivery transfers. A Cooperative that receives an inter-sector transfer of Chinook salmon PSC bycatch units to cover an "A" season overage shall reduce the amount of its Vessels' "B" season Base Cap Credit Allocations by the amount of the inter-sector transfer. The Inshore Sector Cooperative receiving an inter-sector transfer of Chinook salmon PSC units shall notify the Manager of the identity of the Vessel(s) receiving the transferred units. An inter-sector transfer received under this provision shall increase the Annual Use Limit(s) of the Vessel(s) to which it is allocated.

**6.5.2** If the inshore sector's Chinook salmon PSC bycatch in the Bering Sea pollock fishery exceeds the Annual Threshold Amount during the course of a year, and if there has been no more than one (1) year during the prior six (6) years when the inshore sector has exceeded the Annual Threshold Amount, an Inshore Sector Cooperative may receive an inter-sector transfer of Chinook salmon PSC bycatch units, provided that the Vessel(s) using such transferred bycatch units must have an equal or greater amount of Salmon Savings Credits available, and all such transferred bycatch units used by such Vessel(s) shall be accounted for as Salmon Savings Credits used by such Vessel(s). The Inshore Sector Cooperative receiving an inter-sector transfer of Chinook salmon PSC units shall notify the Manager of the identity of the Vessel(s) receiving the transferred units. An inter-sector transfer received under this provision shall increase the Annual Use Limit(s) of the Vessel(s) to which it is allocated.

**6.5.3** No Inshore Sector Cooperative shall transfer any inshore sector Chinook bycatch units to an "entity" in another sector unless and until all Inshore Sector Cooperatives have completed their directed pollock fishing for the year. Subject to the foregoing, an Inshore Sector Cooperative may transfer only Base Cap Credit Chinook salmon bycatch PSC units to entities in other sectors.

**7. Insurance Pool Management.** The Insurance Pool shall be funded annually in accordance with Section 3, above. Insurance Pool credits that are not used during the "A" season shall be carried

over to fund the Insurance Pool for the "B" season. If the entire Insurance Pool is used during any single season, there shall be no Insurance Pool credits available for the balance of that season.

**7.1 Insurance Pool Use.** Subject to the terms and conditions of this Section 7, if a Vessel in an Inshore Sector Cooperative takes Chinook salmon PSC as bycatch in the Bering Sea pollock fishery in an amount that exceeds the Vessel's Available Credit Limit, the excess bycatch shall be covered with credits from the Insurance Pool, if any are available. Any Vessel using Insurance Pool credits shall immediately notify the Manager in writing.

**7.2 Insurance Pool Repayment and Usage Assessments.** A Vessel that has Chinook salmon PSC bycatch covered by the Insurance Pool shall contribute credits to the Insurance Pool in accordance with this Section 7.2.

**7.2.1** Each Vessel shall repay to the Insurance Pool the amount of Insurance Pool credits used to cover the Vessel's Chinook salmon PSC bycatch. A Vessel may repay the Insurance Pool by acquiring Base Cap Credits from another Vessel within ten (10) days of completing its offload for the trip in connection with which its Chinook salmon PSC bycatch is covered by the Insurance Pool. Any Vessel repaying Insurance Pool credits shall immediately notify the Manager in writing. If a Vessel makes a repayment with acquired Base Cap Credits within such 10 day period, the Vessel shall not be liable for an Insurance Pool usage assessment. If a Vessel fails to do so within such 10 day period, it shall pay the appropriate Insurance Pool usage assessment, and unless they are repaid before through a Base Cap Credit acquisition and transfer, the amount of credits the Vessel owes as repayment shall be deducted from its Base Cap Allocation at the beginning of the following season(s) until its repayment obligation is satisfied in full. All Insurance Pool repayments shall be accounted for as deposits into the Insurance Pool.

**7.2.2** In addition to repaying the Insurance Pool for the credits used to cover its Chinook salmon PSC bycatch, each Vessel that has its Chinook salmon PSC bycatch covered by the Insurance Pool and fails to repay the Insurance Pool by acquiring additional Base Cap Credits within the 10 day period set forth in Section 7.2.1, above, shall pay an additional Insurance Pool usage assessment. All Insurance Pool usage assessments shall be accounted for as deposits into the Insurance Pool account.

**7.2.2.1** Vessels that are "Qualified" shall have an Insurance Pool usage assessment obligation equal to fifty percent (50%) of the amount of credits from the Insurance Pool used to cover their Chinook salmon PSC bycatch. For purposes of this Section 7.2.2.1, a Vessel shall be deemed to be "Qualified" if (i) as of the date on which the Vessel started its first tow of the fishing trip during which the Vessel's Chinook salmon PSC bycatch exceeded its Available Credit Limit, the Vessel had an amount of Available Cap Credits sufficient to cover the Vessel's actual pollock harvest from such fishing trip, if the Vessel's Chinook bycatch rate during such fishing trip had been equal to or less than the then-current seven (7) day rolling average Chinook bycatch rate of all other Vessels as calculated and published by the Monitoring Agent; and (ii) the Vessel at no time during such fishing trip fished within a rolling hot spot Savings Closure Area (as defined in Section 9, below), regardless of the Vessel's eligibility to do so. The Manager shall have the authority to determine if a Vessel is Qualified, in the Manager's sole discretion.

**7.2.2.2** Vessels using Insurance Pool credits that are not deemed to be Qualified, but that started the relevant fishing trip with Available Cap Credits, shall pay an Insurance

Pool usage assessment payment equal to two hundred percent (200%) of the amount of credits from the Insurance Pool used to cover their Chinook salmon PSC bycatch.

7.2.2.3 Pursuant to Section 11 of this Agreement, each Vessel is obligated to have Available Cap Credits when it starts a fishing trip. A Vessel that starts a fishing trip without Available Cap Credits which has its Chinook salmon PSC bycatch covered by the Insurance Pool shall pay an Insurance Pool usage assessment equal to four hundred percent (400%) of the amount of credits from the Insurance Pool used to cover its Chinook salmon PSC bycatch.

8. Vessel and Cooperative Overage Stop Fishing Orders. If the Chinook salmon PSC bycatch of a Vessel, Opt-In Vessel or CDQ Vessel exceeds its Available Credit Limit, the Cooperative of which such vessel is a member shall immediately issue a "stop fishing" order to such vessel. If the aggregate Chinook salmon PSC bycatch of the vessels in one or more Cooperatives exceeds their Cooperative's aggregate Available Cap Limit, such that Manager in his or her sole discretion concludes that the inshore sector is at risk of exceeding its Annual Threshold Amount for the third (3<sup>rd</sup>) time in a seven (7) year period, upon receiving notice to that effect from the Manager, all Cooperatives shall immediately take all steps necessary to prevent the inshore sector from exceeding the Annual Threshold Amount, including but not limited to issuing "stop fishing" orders to all Vessels in the Cooperative, regardless of whether the Vessels in the Cooperative still have Available Cap Credits. If the Manager is notified that the Chinook salmon PSC bycatch of one or more Opt-In Vessels or CDQ Vessels could cause the catcher/processor sector, mothership sector or a CDQ organization to exceed its performance standard, the Manager shall immediately issue a "stop fishing" order to such vessel(s).

8.1 Cooperative Vessel Injunctions. To give effect to the provisions of this Section 8, each Cooperative agrees to take all actions necessary to obtain injunctive relief against any vessel in such Cooperative that does not cease fishing when the Cooperative issues a "stop fishing order", including but not limited to obtaining written consent in advance to such injunctive relief and a waiver of all rights to request an injunction-related bond from all Cooperative members.

8.2 Manager and Third Party Cooperative Authority. Each Cooperative agrees that if such Cooperative fails to issue a "stop fishing" order to one or more of its member vessels on a timely basis or fails to seek injunctive relief on a timely basis, both as determined by the Manager in his or her sole discretion, then one or more other Cooperatives and/or the Manager shall have the authority to issue the "stop fishing" order and seek injunctive relief against any of such Cooperative's vessels that do not stop fishing when the "stop fishing" order is issued.

9. Rolling Hot Spot Program. All references to "Vessels" in this Section 9 shall be construed as referring collectively to "Vessels", "Opt-In Vessels" and "CDQ Vessels". When the Vessels' catch of Chinook salmon PSC during a season is less than twenty-five percent (25%) of the total amount of Base Cap Credits held by the Vessels for that season, all Bering Sea pollock fishing by the Vessels shall be subject to area closures implemented under a "rolling hot spot" program, as provided in this Section 9 (the "Rolling Hot Spot Program"). When in effect, the terms and conditions of this Section 9 implementing the Rolling Hot Spot Program shall be in addition to, and not in substitution for, the other terms and conditions of this Agreement.

9.1 Monitoring and Management. The Cooperatives shall retain the Monitoring Agent to provide the data gathering, analysis, fleet monitoring and reporting services necessary to implement

the Rolling Hot Spot Program. The Coops shall retain UCB to provide day-to-day management of the Rolling Hot Spot Program.

9.2 Savings Area Management. The Monitoring Agent shall use a bycatch rate (the "Base Rate") as a trigger for identifying areas closed to pollock fishing by certain Vessels, and as a basis for determining each Vessel's "tier status", which in turn shall govern whether, and if so, when, each Vessel may harvest pollock inside of a Savings Area.

9.3 Base Rate Calculation and Announcement. The Monitoring Agent shall set the Base Rate on a weekly basis. The Monitoring Agent shall announce the Base Rate each Thursday by 6:00 pm Pacific time, and the Base Rate shall be in effect for seven (7) days, from the following day (Friday) at 6:00 pm Pacific time. Other than as provided in Section 9.4, below, the Monitoring Agent shall calculate the average weekly rate of Chinook salmon taken as bycatch per metric ton of pollock by vessels harvesting pollock from the inshore sector allocation for the last three (3) weeks, as of each Thursday. The Base Rate shall be the greater of (i) the average bycatch rate calculated by the Monitoring Agent, or (ii) the rate of 0.035 Chinook salmon PSC per metric ton of pollock.

9.3.1 The Monitoring Agent shall use "A" season bycatch data from the period January 20 through January 29 of each year to provide the Vessels with preliminary information regarding the location and concentration of Chinook salmon, and to determine the initial Base Rate, the initial Savings Area closures and the initial Vessel Tier assignments (as defined below). The Monitoring Agent shall implement Chinook Savings Area closures as appropriate commencing on January 30<sup>th</sup> of each year, and thereafter through the balance of each "A" and "B" season.

9.4 Vessel Tier Assignments. For purposes of tier assignments, Vessel Chinook salmon PSC bycatch rates shall be the rate of Chinook salmon PSC taken as bycatch per metric ton of pollock during the relevant time period (i.e., initially the January 20 through 29 time period, and thereafter, the prior two (2) weeks). For purposes of this Section 9.4, a Vessel's Chinook salmon PSC bycatch shall be determined with reference to observer data. Vessels with Chinook salmon PSC bycatch rates equal to or less than the then-current Base Rate shall be assigned to "Tier 1". Vessels with Chinook salmon PSC bycatch rates greater than the then-current Base Rate shall be assigned to "Tier 2".

9.5 Bycatch Hot Spot Identification. The Monitoring Agent shall calculate the Chinook salmon PSC bycatch rates for each ADF&G statistical area for which the Monitoring Agent receives a Chinook salmon PSC bycatch report, and when feasible, for each lateral half of each such statistical area. Each Thursday, the Monitoring Agent shall calculate the rate of Chinook salmon PSC taken as bycatch per metric ton of pollock in each such area by vessels harvesting pollock from the inshore sector allocation during the prior seven (7) days, as the Monitoring Agent determines appropriate given the quality of data available for the area. The bycatch rates shall be calculated on the basis of NMFS observer data.

9.6 Salmon Savings Areas. When the Rolling Hot Spot Program is in effect pursuant to this Section 9, on January 30 and on each Thursday thereafter, for the duration of the "A" season, and on June 20 and on each Thursday thereafter for the duration of the "B" season, the Monitoring Agent shall, subject to the criteria set forth below, provide notice to the Vessels identifying one or more areas designated as "Chinook Savings Areas", within which pollock fishing shall be restricted on the basis of each Vessel's Tier status.

**9.6.1 Savings Area Designation Criteria.** To qualify as a Chinook Savings Area, (a) an amount of pollock that the Monitoring Agent in its sole discretion determines to be substantial must have been taken in the Chinook Savings Area during the period on which its designation as a Chinook Savings Area is based, or the area must have been designated a Chinook Savings Area for the prior notification period and there must be evidence satisfactory to the Monitoring Agent in its sole discretion that suggests that Chinook bycatch rates in the area are not likely to have changed, and (b) the Chinook salmon bycatch rate in the area for the period on which its definition as a Savings Area is based must exceed the Base Rate. For purposes of (a), above, the Monitoring Agent shall consider a pollock harvest of two percent (2%) of the total amount of pollock harvested by vessels harvesting from the inshore allocation during the period on which a Savings Area designation is based to be indicative of, but not dispositive of, whether a substantial amount of pollock has been harvested in an area. Notwithstanding the foregoing, the Monitoring Agent shall identify and close Chinook Savings Areas in accordance with the terms of that certain "Chinook Conservation Agreement" among the Inshore Sector Cooperatives, dated as of January 11, 2008, a copy of which is attached to this Agreement as Exhibit 2. For purposes of this Agreement, all Vessels shall be subject to the terms and conditions of the Chinook Conservation Agreement as though they were parties to that Agreement.

**9.6.2 Savings Area Boundaries and Limitations.** Subject to the limits set forth in this Section, Chinook Savings Areas shall be defined by a series of latitude/longitude coordinates as the Monitoring Agent determines appropriate to address Chinook salmon PSC bycatch. Notwithstanding the foregoing, the following limits shall apply to designations of Chinook Savings Areas: (i) unless overriding evidence indicates that seasonal patterns of Chinook salmon PSC bycatch have shifted spatially relative to those experienced during the years 2000-2009, Chinook Savings Area closures shall only be made within areas that the Monitoring Agent identifies as having high Chinook salmon bycatch potential based on the Chinook bycatch patterns and rolling hot spot closures during the years 2000 through 2009 as identified on the attached Exhibit 3; (ii) the total closed area encompassed by all Chinook Savings Areas in effect at any given time shall not exceed one thousand (1,000) square miles; (iii) subject to (ii), above, at the discretion of the Monitoring Agent and the Manager, up to three separate areas may be closed during any single one week closure period.

**9.6.3 Chinook Savings Area Closure Announcements.** Chinook Savings Area closures announced on Thursdays (the "Thursday Announcement" of the "Friday Closures") shall be effective from 6:00 pm the following Friday through 6:00 pm the Friday thereafter. Upon a Chinook Savings Area closure taking effect, Bering Sea pollock fishing by Vessels shall be restricted pursuant to Section 9.7, below. Each Thursday Announcement shall include the following information: (i) identification of the Chinook Savings Areas by chart and by listing the corner coordinates of the Chinook Savings Area boundaries; (ii) a season update on pollock harvest and Chinook salmon PSC bycatch by pollock fishery sector and in total; (iii) each Vessel's Tier status and rolling three (3) week average bycatch rate; (iv) the current Base Rate; (v) the average bycatch rate for the inshore sector fleet during the previous week; (vi) the most recent Chinook salmon PSC bycatch rates for each ADF&G statistical area in which there was directed pollock fishing during the previous week; (vii) a summary of seasonal and annual pollock harvests and seasonal and annual Chinook salmon PSC bycatch in the pollock fishery; (viii) a summary of Chinook salmon PSC bycatch amounts and trends relative to the Annual Threshold Amount; and (ix) general commentary on Chinook salmon PSC bycatch patterns and trends.

**9.7 Chinook Savings Area Implementation.** Tier 2 Vessels shall not fish in Chinook Savings Areas announced on a Thursday for a one (1) week period, commencing on the immediately

following Friday at 6:00 pm Pacific time. Tier 1 Vessels may fish in Chinook Savings Areas. For purposes of this Agreement, "fishing" shall mean all activity of a Vessel between the time of initial "gear deployment" and final "gear retrieval". "Gear deployment" and "gear retrieval" shall have the meanings given them in 50 C.F.R. 679.2 or its successor, as the same may be amended from time to time. Initial gear deployment shall mean setting trawl gear with an empty codend, and final gear retrieval shall mean retrieving trawl gear to either pull a codend aboard the Vessel or to deliver the codend to another vessel.

**9.8 Data Gathering and Reporting.** Vessels shall take all actions necessary to release their NMFS observer reports and official landing records to the Monitoring Agent as soon as commercially practicable after such documents are completed.

**9.9 Savings Area Closure Enforcement.** The Monitoring Agent shall monitor the fishing activities of all Vessels and shall promptly report all apparent Chinook Savings Area violations by a Vessel to the Board of Directors of the Cooperative to which the Vessel belongs. If the Vessel is a member of the Virtual Cooperative, the Monitoring Agent shall report apparent violations to the Manager. Upon receiving notice of an apparent violation from the Monitoring Agent, the Board of Directors or the Manager of the Cooperative to which the Vessel belongs shall have one hundred and eighty (180) days to take action in connection with the apparent violation, and to provide a report of the action taken and a copy of the record supporting that action to all other Coops.

**9.10 Savings Area Violation Damages.** If a Cooperative Board of Directors (or, in the case of the Virtual Cooperative, the Manager) determines that a Vessel that is a member of the Cooperative fished in a Chinook Savings Area in violation of this Agreement, the master of the Vessel determined to be in violation shall be required to pay an assessment. The assessment for a Vessel master's first (1<sup>st</sup>) annual violation of a Chinook Savings Area closure shall be one thousand dollars (\$1,000.00); the assessment for a Vessel master's second (2<sup>nd</sup>) annual violation of a Chinook Savings Area closure shall be five thousand dollars (\$5,000.00); and the assessment for a Vessel master's third (3<sup>rd</sup>) and subsequent annual violations of a Chinook Savings Area closure shall be ten thousand dollars (\$10,000.00). Because the damages resulting from violating a Chinook Savings Area closure are difficult to estimate, the foregoing assessment amounts are liquidated damages, the payment of which (together with reasonable costs of collection) shall satisfy a Vessel's and a Vessel master's obligations related to a Chinook Savings Area closure violation. The Inshore Sector Cooperatives shall take all actions necessary to give effect to this Section 9.10.

**9.10.1** Funds collected in connection with a Chinook Savings Area violation, in excess of those necessary to reimburse the prevailing party for its costs and attorneys' fees, shall be paid to the Manager, and shall be expended as decided by majority vote of authorized representatives of the Inshore Sector Cooperatives to support research concerning salmon bycatch issues.

**9.10.2** For purposes of this Section 9, state and federal landing reports, observer data, VMS tracking data, vessel log books and plotter data and Cooperative catch data produced by the Monitoring Agent in conformance with NMFS catch accounting procedures shall be presumed accurate and sufficient for determining whether a Vessel violated a Chinook Savings Area closure, absent a clear and compelling demonstration of manifest error. The Cooperatives agree to take all actions and execute all documents necessary to give effect to this provision.

9.11 Vessel Monitoring System. The Vessels shall obtain and maintain an operational VMS unit approved by the Monitoring Agent, provided that such units are available on a commercially reasonable basis. The Vessels shall release their VMS tracking data to the Monitoring Agent. The Monitoring Agent shall not disclose any such information, other than as specifically authorized by the Inshore Sector Cooperatives and the Manager. Because the damages resulting from a Vessel operating in non-compliance with this subsection are difficult to estimate, Vessels shall pay an assessment of One Thousand Dollars (\$1,000.00) per day for each consecutive day over thirty (30) consecutive days that a Vessel is employed in the Bering Sea pollock fishery without an operational VMS unit approved by Monitoring Agent, provided such unit is available on a commercially reasonable basis.

10. Virtual Cooperative Vessels, Opt-In Vessels and CDQ Vessels. The Vessels, Opt-In Vessels and CDQ Vessels in the Virtual Cooperative shall be subject to all obligations that are assumed in common by the Vessels in the Inshore Sector Cooperatives in connection with the Inshore Sector Cooperatives' participation in the Chinook salmon savings incentive plan implemented by this Agreement. Such obligations include the obligation to manage the Chinook salmon PSC allocations of the Vessels, Opt-In Vessels and CDQ Vessels such that the aggregate annual and seasonal allocations of such Vessels, Opt-In Vessels and CDQ Vessels are not exceeded.

10.1 The Manager shall have absolute authority, in the Manager's sole discretion, to establish annual and seasonal allocations of Chinook salmon PSC among the members of the Virtual Cooperative on a pro rata basis, according to the amounts of Chinook salmon PSC assigned to open access fishery in connection with each Vessel's participation in that fishery, and the amount of Chinook salmon PSC available for each Opt-In Vessel's and CDQ Vessel's use in connection with their Chinook salmon bycatch entity membership.

10.2 Because allocations to some or all of the Virtual Cooperative's members may not be transferable, Vessels, Opt-In Vessels and CDQ Vessels in the Virtual Cooperative shall not participate in the Insurance Pool.

11. General Vessel and Cooperative Rights and Obligations. To give effect to this Agreement, all Vessels, Opt-In Vessels, CDQ Vessels and Cooperatives shall have the following general rights and shall be subject to the following general obligations.

11.1 Compliance Agreement. The parties to this Agreement hereby agree to comply with all provisions of this Agreement. Each person who signs this Agreement as an authorized representative of an Inshore Sector Cooperative acknowledges that the Inshore Sector Cooperative he or she represents is executing this Agreement on behalf of the individuals, entities and vessels that are members of such Cooperative and that have agreed to participate in the IPA implemented under this Agreement, as listed on Exhibit 4.

11.2 Further Actions. The Cooperatives shall cause their members to take all actions and execute all documents necessary to give effect to this Agreement.

11.3 Vessel Owner Assumption of Vessel Obligations. Vessels, Opt-In Vessels and CDQ Vessels are granted rights and assume obligations under this Agreement, because this Agreement will not achieve its full intended effect unless those rights are granted and obligations are imposed on individual Vessels, Opt-In Vessels and CDQ Vessels, rather than on an individual or entity that may own



more than one Vessel, Opt-In Vessel or CDQ Vessel. However, notwithstanding any provisions of this Agreement to the contrary, the obligations of each Vessel, Opt-In Vessel and CDQ Vessel under this Agreement are and shall be deemed obligations of the individual(s) or entity or entities that own such Vessel, Opt-In Vessel or CDQ Vessel, other than those which are specifically imposed on the Vessel's master under Section 9, above. The Inshore Sector Cooperatives shall cause their Vessel owner members to each assume the obligations of their Vessels under this Agreement. The owners of each of the Vessels, Opt-In Vessels and CDQ Vessels in the Virtual Cooperative shall be deemed to have assumed all obligations imposed on their respective Vessels, Opt-In Vessels and CDQ Vessels by their election to participate in the Chinook salmon PSC bycatch avoidance incentive plan implemented under this Agreement.

11.4 Available Cap Credit Accounting and Management. Each Vessel, Opt-In Vessel and CDQ Vessel shall be responsible for accurately calculating the amount of Available Cap Credits it has available during the course of its fishing activity, and for conducting its fishing activity in compliance with its Available Credit Limit.

11.5 No Fishing Without Available Cap Credits. No Vessel, Opt-In Vessel or CDQ Vessel shall commence a fishing trip without Available Cap Credits. If a Vessel, Opt-In Vessel or CDQ Vessel does so, the Cooperative of which such vessel is a member shall immediately issue a "stop fishing" order to such vessel, and shall promptly seek injunctive relief to cause such vessel to cease fishing if such vessel fails to immediately comply with such "stop fishing" order.

11.6 Initial Allocation of Savings Credits Based on 2010 Fishing Year. The Inshore Sector Cooperatives have conducted their 2010 pollock fishing activities as though the IPA implemented under this Agreement was in effect, and Vessels have accrued Salmon Savings Credits accordingly. All Salmon Savings Credits earned in connection with 2010 fishing activity shall be credited to the Vessels' accounts for the 2011 fishing year.

12. Remedies for Breach: Waiver of All Monetary Damages, Limitation of Remedies and Authorization of Injunctive Relief. The Cooperatives acknowledge that the consequences associated with a breach of this Agreement by one or more Cooperatives or their members could include extremely large financial losses associated with forgone pollock fishing opportunities, and if the breach results in the inshore sector exceeding its performance standard under Amendment 91, a breach of this Agreement could result in permanent revision of the annual Bering Sea Chinook salmon PSC limit for the inshore sector from 60,000 Chinook salmon to 47,591 Chinook salmon, which could result in extremely large financial losses associated with forgone pollock fishing opportunities over a period of many years. The damages associated with these consequences are very difficult to quantify and could be so large that the Cooperative(s) or the Cooperative member(s) whose breach of this Agreement caused the damages to be suffered by others would not be capable of paying them within any reasonable period of time. Under these circumstances, the parties to this Agreement have concluded that, other than as specifically and explicitly provided in this Agreement, damages are not an effective remedy for breach of this Agreement. The parties to this Agreement have therefore elected instead to waive any rights to monetary damages, other than the damages specifically and explicitly authorized under this Agreement, and instead to adopt specific performance as the sole remedy for all other breaches of this Agreement by a Cooperative or its members, as set forth in this Section 12.

**12.1 Waiver and Release of All Monetary Damages.** The Cooperatives, acting on behalf of themselves and their members, hereby waive and release any and all claims that they may have against another Cooperative or its members for monetary damages for a breach of this Agreement, other than those specifically and explicitly authorized under this Agreement. This waiver extends to and includes all claims to direct, indirect, consequential, punitive, special or exemplary damages, regardless whether such damages are based on breach of contract, tort, or some other cause of action. This waiver and release applies to every type of breach of this Agreement, including but not limited to willful, knowing, grossly negligent, negligent and non-negligent breaches of this Agreement of any nature whatsoever.

**12.2 Limitation of Remedies.** As a substitute for the monetary damages waived and released under this Agreement, the Cooperatives, acting on behalf of themselves and their members, hereby limit their remedies for breach to the following:

**12.2.1 Specific Performance.** The Cooperatives, their members, the Manager and the Monitoring Agent shall individually and collectively have the right to demand and receive immediate specific performance of each and every obligation that each Cooperative and its members have under this Agreement.

**12.2.2 Injunctive Relief.** If a Cooperative or any of its members are in breach of any obligation whatsoever they may have under this Agreement, and if the Cooperative or Cooperative member in breach fails to immediately comply with each and every obligation it has under this Agreement upon receiving a written demand to that effect from the Manager, the Monitoring Agent, another Cooperative or one or more Cooperative members, the Manager, the Monitoring Agent, each Cooperative and each Cooperative member shall individually and collectively have the right to seek and obtain injunctive relief requiring the Cooperative or Cooperative member in breach to immediately and fully comply with each and every obligation it has under this Agreement.

**12.2.3 Reimbursement of All Costs and Fees.** Notwithstanding any provision of this Agreement to the contrary, each Cooperative and each Cooperative's members, the Manager and the Monitoring Agent shall be entitled to reimbursement of all costs and fees they incur in connection with any legal action they may individually or collectively take to enforce the terms and conditions of this Agreement, including but not limited to all attorneys' fees, arbitration costs, court costs, costs of bonds or other financial security posted or pledged in connection with such action, expert witness costs, costs of receivers or special masters, and each and every other cost or fee of any nature or amount whatsoever incurred in connection with such action, regardless of whether such cost is deemed reasonable in nature or amount.

**12.3 Indemnification Against All Governmental Fines, Penalties and Forfeitures.** Notwithstanding any provision of this Agreement to the contrary, each Cooperative that breaches this Agreement or whose member or members breach this Agreement shall indemnify, defend and hold the Manager, the Monitoring Agent and each Cooperative and each Cooperative's members harmless from and against all claims, liabilities, fines, penalties, forfeitures and fees of any nature and amount whatsoever asserted or obtained by NMFS, the U.S. Department of Justice or any other U.S. governmental agency with jurisdiction over the Bering Sea pollock fishery in connection with a Cooperative or a Cooperative's member or members' breach of this Agreement. This indemnification, defense and hold harmless shall extend to all attorneys' fees and all other costs and fees of any nature

or amount whatsoever incurred in relation to such action, regardless of whether such cost is deemed reasonable in nature or amount.

13. Agreement Duration and Termination. This Agreement shall take effect as of January 1, 2011, unless its effectiveness is delayed beyond that date under the regulations implementing Amendment 91. This Agreement shall remain in effect unless and until it no longer satisfies the IPA requirements of the regulations implementing Amendment 91.

14. Withdrawal and Continuing Obligations. No Vessel, Opt-In Vessel or CDQ Vessel shall withdraw from participation in the IPA implemented under this Agreement other than in strict compliance with this Section 14. All other attempts to withdraw shall be void and shall have no effect.

14.1 No Vessel, Opt-In Vessel, CDQ Vessel or Inshore Sector Cooperative shall withdraw from the IPA during a Bering Sea pollock fishing year.

14.2 No Vessel, Opt-In Vessel, CDQ Vessel or Inshore Sector Cooperative shall withdraw from this Agreement unless and until all of its outstanding obligations (and, in the case of a Cooperative, its members' obligations) under this Agreement are fully satisfied. For purposes of illustration, and without limitation, no Vessel shall withdraw unless and until it has satisfied all of such Vessel's Insurance Pool repayment and usage assessment obligations.

14.3 A Vessel, Opt-In Vessel, CDQ Vessel or Inshore Sector Cooperative that wishes to withdraw from this Agreement must notify the Board of Directors of the Cooperative to which it belongs and the Manager in writing on or before October 1 of the year prior to the year in which such withdrawal will be effective. If delivered by that date, the Vessel's withdrawal shall be effective as of December 31 of the year during which such notice was delivered.

15. Manager. The Inshore Sector Cooperatives shall retain a person to fulfill the obligations of the "Manager" under this Agreement. The Manager shall be the "IPA representative" as defined in the regulations implementing Amendment 91. The Inshore Sector Cooperatives and UCB shall enter into an arrangement under which Mr. John Gruver, an employee of UCB, shall assume the obligations of "Manager" under this Agreement, until such time as the Inshore Cooperatives appoint a substitute Manager.

16. Monitoring Agent. The Inshore Sector Cooperatives shall retain Sea State as the "Monitoring Agent" under this Agreement, until such time as the Inshore Sector Cooperatives appoint a substitute Monitoring Agent.

17. Release and Waiver of All Claims Against Manager, UCB and Monitoring Agent; Indemnification and Hold Harmless. The parties acknowledge that the effectiveness of this Agreement depends to a significant extent on the Manager and Monitoring Agent exercising their independent responsibility and judgment in fulfilling its terms. The parties further acknowledge that if the Manager or the Monitoring Agent were potentially liable for simple negligence in connection with such actions, the Manager and/or the Monitoring Agent would not accept the responsibilities they assume under this Agreement. It is therefore in the parties' interest to reduce the Manager's and the Monitoring Agent's potential liability under this Agreement. Therefore, the Inshore Sector Cooperatives hereby waive and release any and all claims against John Gruver, UCB and Sea State arising out of or relating to John

Gruver's, UCB's or Sea State's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by John Gruver, UCB and Sea State. Further, the Inshore Sector Cooperatives jointly and severally agree to indemnify, defend and hold John Gruver, UCB and Sea State harmless against any third party claims asserted against John Gruver, Sea State or UCB arising out of or relating to John Gruver's, Sea State's or UCB's services in connection with this Agreement, other than those arising out of gross negligence or willful misconduct by John Gruver, Sea State or UCB.

18. Amendments. No amendment to this Agreement shall be effective unless and until it is executed in writing by all parties to this Agreement, and approved by NMFS in accordance with the regulations implementing Amendment 91.

19. Miscellaneous.

19.1 This Agreement shall be governed by and construed in accordance with applicable federal law and the laws of the State of Washington.

19.2 This Agreement may be executed in counterparts which, when taken together, shall have the same effect as a fully executed original. Delivery of a signed copy of this Agreement by telefacsimile or email shall have the same effect as delivering a signed original.

19.3 The parties agree to execute any documents necessary or convenient to give effect to the intents and purposes of this Agreement.

19.4 All notices required to be given under this Agreement shall be deemed given five (5) days following deposit in certified first class U.S. mail, postage prepaid, with the correct address, or upon the first business day following confirmed telefacsimile or email transmission to the recipient. Each party to this Agreement agrees to provide the name, postal address, telefacsimile number and email address of its duly authorized representative(s) for purposes of receiving notices under this Agreement within three (3) days of executing this Agreement.

19.5 In the event that any provision of this Agreement is held to be invalid or unenforceable, such provision shall be deemed to be severed from this Agreement, and such holding shall not affect in any respect whatsoever the validity of the remainder of this Agreement.

19.6 Each party to this Agreement agrees to use its best efforts to resolve any disputes arising under this Agreement through direct negotiations. Breaches of this Agreement for which a party seeks a remedy other than injunctive relief that are not resolved through direct negotiation shall be submitted to binding arbitration in Seattle, Washington upon the request of any party to this Agreement. The party's written request will include the name of the arbitrator selected by the party requesting arbitration. The other party will have ten (10) days to provide written notice of the name of the arbitrator it has selected, if any. If the other party timely selects a second arbitrator, the two arbitrators will select a third arbitrator within ten (10) days. If the other party does not timely select the second arbitrator, there shall be only the one arbitrator. The single arbitrator or the three (3) arbitrators so selected will schedule the arbitration hearing as soon as possible thereafter. No arbitrator, however chosen, shall have any material ties to any party to this Agreement or any Inshore Cooperative member. The decision of the arbitrator (or in the case of a three (3) arbitrator panel, the decision of the majority) will be final and binding. The arbitration will be conducted under the rules of

(but not by) the American Arbitration Association. The parties will be entitled to limited discovery as determined by the arbitrator(s) in his or her or their sole discretion. The arbitrator(s) will also determine the "prevailing party" and that party will be entitled to its reasonable costs, fees and expenses, including attorneys' and arbitrator fees, incurred in the action by said party. In no event will arbitration be available pursuant to this paragraph after the date when commencement of such legal or equitable proceedings based on such claim, dispute, or other matter in question would be barred by the applicable statute of limitations.

Entered into as of the date first set forth above.

AKUTAN CATCHER VESSEL ASSOCIATION

By [Signature]  
Its FRES.

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_

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Entered into as of the date first set forth above.

AKUTAN CATCHER VESSEL ASSOCIATION

By \_\_\_\_\_  
Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By Pat Hedonia  
Its President

PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_

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Entered into as of the date first set forth above.

AKUTAN CATCHER VESSEL ASSOCIATION

By \_\_\_\_\_  
Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

PETER PAN FLEET COOPERATIVE

By Michael Maat  
Its PRESIDENT

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_

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AKUTAN CATCHER VESSEL ASSOCIATION

By \_\_\_\_\_  
Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its Vice Pres

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By [Signature]  
Its Executive Director

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_



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Entered into as of the date first set forth above.

AKUTAN CATCHER VESSEL ASSOCIATION

By \_\_\_\_\_  
Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

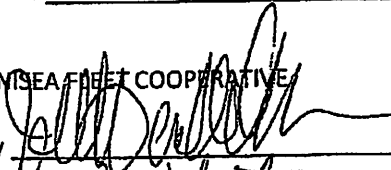
PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By  \_\_\_\_\_  
Its President \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_

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AKUTAN CATCHER VESSEL ASSOCIATION

By \_\_\_\_\_  
Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By Robert C. Doof  
Its president

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By \_\_\_\_\_  
Its \_\_\_\_\_

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AKUTAN CATCHER VESSEL ASSOCIATION

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Its \_\_\_\_\_

NORTHERN VICTOR FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

PETER PAN FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNALASKA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNISEA FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

WESTWARD FLEET COOPERATIVE

By \_\_\_\_\_  
Its \_\_\_\_\_

UNITED CATCHER BOATS

By \_\_\_\_\_  
Its \_\_\_\_\_

SEA STATE, INC.

By Kurt H. G. [Signature]  
Its President

**2011 Inshore Salmon Savings Incentive Plan Annual Report**

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Submitted to the

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**Introduction.** In 2011 all AFA qualified inshore catcher vessels were members of the Inshore Salmon Savings Incentive Plan (SSIP) Agreement. The Inshore SSIP was first submitted for approval by NMFS on September 30, 2010 and approved on November 5, 2010. An amended Inshore SSIP Agreement was submitted for approval on June 21, 2011. We received NMFS approval for the amended Agreement on June 28, 2011. The SSIP approved on June 28 continues in place for 2012 with all inshore catcher vessels still members.

The 2011 Inshore SSIP report is a requirement under the Amendment 91 regulations. Each required reporting element is covered in Sections 1 through 4.

The Inshore Chinook Salmon Savings Incentive Plan Agreement is found at the end of this report as Appendix 1.

**Section 1. A comprehensive description of the incentive measures in effect in the previous year.**

The following paragraph comes from page 5 of the Inshore Salmon Savings Incentive Plan Agreement and captures the main elements of the Incentive Plan Agreement (IPA).

**Agreement Summary.** The vessels participating in this IPA receive an annual allocation of Chinook salmon bycatch units, which limits their Chinook salmon PSC bycatch to their pro-rata share of the 47,591 Chinook salmon PSC performance standard, less Insurance Pool deductions for Inshore Cooperative Vessels. A vessel can earn additional Chinook bycatch units by catching fewer Chinook salmon PSC as bycatch than the amount of its annual allocation, at a rate of one (1) additional unit for every three (3) allocated units that are not used. The Insurance Pool is a Chinook bycatch unit reserve, which is available to Inshore Sector Cooperative Vessels whose Chinook bycatch exceeds the number of bycatch units they hold. Inshore Sector Cooperative Vessels using Insurance Pool bycatch units are required to repay the Insurance Pool, and to pay an additional Insurance Pool usage penalty. If the inshore sector's Chinook salmon bycatch exceeds its performance standard for two (2) years in a six (6) consecutive year period, each Cooperative is required to take all actions necessary to insure that the Chinook salmon bycatch of its Vessels does not exceed the Annual Threshold Amount for a third (3<sup>rd</sup>) year in a seven (7) consecutive year period. A rolling hot spot closure program closes areas of relatively high Chinook salmon PSC bycatch to vessels that have relatively high rates of Chinook salmon bycatch during periods when the vessels participating in this IPA are experiencing relatively low levels of Chinook salmon encounter.

**Earning Savings Credits.** As described above, the main incentive for members of the SSIP to minimize Chinook bycatch whenever possible is by earning additional Chinook bycatch units. These earned units are called Savings Credits. Each SSIP vessel is given an initial set of bycatch units called Base Cap Credits (its share of the 47,591 performance Standard). On an annual basis, a vessel earns one Savings Credit for every 3 Base Cap credits not caught in that year. Without having earned Savings Credits, a vessel may never exceed its share of the performance standard. In other words, the additional Chinook bycatch allowance of 60,000 bycaught salmon

provided to vessels participating in an accepted IPA is not available for use by a SSIP vessel that has not earned Savings Credits. Consequently, without having earned Savings Credits, a vessel is forced to fish as though it was limited to its share of a 47,591 hard cap.

While earning Savings Credits is the strongest incentive in the SSIP, there are several mechanical attributes of the SSIP that contribute to keeping bycatch low whenever possible. First off, Savings Credits, once earned, are not held in perpetuity, but have a life span of 5 years. Therefore SSIP vessels are not able to “rest on their laurels” after a couple of low bycatch years. Because the nature of Chinook bycatch is so variable from one year to the next, vessels are driven to generate Savings Credits at all times. Limitations on how transfer may occur also play a key role in keeping bycatch low.

**Transfers.** While the SSIP does provide for the transfer of Salmon Credits between vessels, there are limitations on transfers. Vessels may only transfer their initially assigned Base Cap Credits. Savings Credits are not transferable and may only be used in the harvest of a vessel’s assigned pollock allocation whose previous pollock harvest resulted in earning those Savings credits.

Transfers defined in the SSIP mainly cover transfer situations that involve both pollock and salmon. These transfers are intended to allow coops to continue operations under the SSIP in a manner consistent with pollock transfers that took place prior to implementation of Amendment 91. Called Blended Paired Transfers and Trip Specific Transfers, these types of transfers combine pollock quota and Salmon Credits together in a balanced fashion. Also, the SSIP provides transfers of both pollock and salmon for very specific conditions pertaining to hardship situations and season completing “mop-up” fishing. While these very specific transfer situations do allow for less balancing of pollock and salmon, their use is very limited.

The transfer of salmon by itself is allowed (Base Cap Credits only) but not without the possibility of an additional salmon tax on salmon only transfers. Vessels receiving a salmon only transfer are subject to a variable tax rate as set by a tax table in the Inshore SSIP Agreement. Vessels receiving salmon only transfers under low bycatch conditions must acquire additional credits that are retired from the program for the remainder of the year. The table setting the tax rates is found in Exhibit 1 of the SSIP Agreement. The tax put on salmon only transfers is designed to put pollock into the hands of cleaner fishermen rather salmon into the hands of dirtier fishermen.

Inter-sector transfers, transfers from one pollock sector to the inshore sector, while allowed under the Amendment 91 regulations are not freely allowed under the SSIP rules. Inter-sector transfers may not be used in a way that puts the inshore sector in jeopardy of exceeding the inshore Performance Standard.

**Insurance Pool.** As both a protective measure and an incentive measure, the SSIP requires each member to contribute to a collective insurance pool. The pool is in place to buffer vessels that

may exceed their available credit limit in each season against regulatory caps. To further incentivize vessels from using the insurance pool, and take precautionary steps towards exceeding their salmon credit allocation, accessing the insurance pool carries a repayment penalty ranging from 150% to 300% depending on the precautions the vessel exhibited on the trip that triggered the overage.

**Rolling Hot Spot Program.** The Inshore SSIP includes a rolling hot spot component similar to the RHS program previously found in the Amendment 84 regulations. While not a direct incentive based element, the addition of an RHS component to the SSIP provides a mechanism for minimizing bycatch during low periods of abundance when it may be difficult for a SSIP fisherman to otherwise make knowledgeable Chinook avoidance decisions.

The program is run at the vessel level rather than at the coop level and vessels are assigned to either of two tier levels; Tier 1 vessels are exempt from the weekly closures and Tier 2 vessel are closed out for the entire week. The SSIP RHS program is suspended once SSIP Chinook bycatch exceeds 25% of the aggregate Base Cap Credits available for any given season.

## **Section 2. A description of how these incentive measures affected individual fishing vessels.**

Simply making vessel specific allocations of a hard cap provides a very strong incentive for vessels to reduce their bycatch. The difficulty comes when a fishermen has progressed far enough into a low bycatch season that the hard cap no longer seems within reach. Under these conditions a vessel may let their bycatch reduction efforts relax. To keep the incentive strong at all levels of Chinook encounters, the SSIP offer continuous motivation to fishermen for the reduction of Chinook bycatch.

Few things do more to get a fisherman's attention than to tell them they only get so much of something to use in the course of fishing. Whether it be the amount of quota they have to catch, length of season they have to catch it in, gallons of fuel they can burn, or limits on Chinook bycatch; more is better. The SSIP does just that, without telling the vessels how to reduce bycatch it simply tells them that in keeping bycatch low whenever possible they will be rewarded with a higher season limit when Chinook bycatch becomes unavoidable.

Without having earned Savings Credits a SSIP vessel is restricted to their share of the 47,591 Performance Standard (Base Cap Credits), less their contribution to the SSIP Insurance Pool. A SSIP vessel that has maximized its available Savings Credits increases its annual limit by 26%. That is strong incentive; the possibility of obtaining a 26% increase is very difficult to ignore.

Additionally, along the lines of "more is better", having earned Savings Credits not only gets a boat through the high bycatch years, maximizing Savings Credits is also a way to access pollock quota beyond a vessel's initial allocation. The SSIP not only inspires the reduction of Chinook

bycatch, it promotes the possibility of additional pollock harvest by fishermen that have managed their salmon credit allocations more frugally.

**Section 3. An evaluation of whether incentive measures were effective in achieving salmon savings beyond levels that would have been achieved in absence of the measures.**

Earning Savings Credits is the main incentive of the Inshore SSIP. The Inshore SSIP members caught a total of 18,484 Chinook salmon in 2011. The inshore sector's share of the Performance Standard is 26,484. The Inshore SSIP caught 8,135 Chinook less than the Performance Standard creating a total of 2,711 Savings Credits earned.

Earning the 2,711 Savings Credits did not come without a price. Towards the end of the 2011 pollock season the Inshore SSIP vessels were faced with increasingly high Chinook bycatch rates. For many vessels the fear of not earning Savings Credits for the year, or even worse consuming the Savings Credits they already held in their accounts, looked to be too high of a price to pay for the amount of pollock that may be caught. Consequently some Inshore SSIP vessels did not catch their entire 2011 pollock quota. In 2011 the inshore sector left 33,199 metric tons of pollock unharvested.

However, in addition to both earning and protecting previously earned Savings Credits, there is an underlying regulatory component to all Chinook IPAs that is also a strong measure in evaluating whether an IPA is effective in reducing bycatch in absence of the IPA measures. That regulatory component requires each pollock sector to stay under its share of the 47,591 Performance Standard in 3 out of 7 years. Upon a sector exceeding its Performance Standard the third time, the sector loses its IPA hard cap at the 60,000 level and must now operate under its share of a 47,591 had cap. That amounts to a 26% reduction for the inshore sector.

In response to this Performance Standard regulation IPAs must contain provisions preventing the IPA group from exceeding the Performance Standard 3 times in a 7 year period. Keeping in mind that exceeding the Performance Standard by even a single fish qualifies as 1 of the 2 years, the inshore sector is very wary of exceeding the Performance Standard even once. The commitment to not exceeding the Performance Standard saves Chinook salmon in comparison to a program that did not include this requirement.



**Section 4. A description of any amendments in the terms of the IPA that were approved by NMFS since the last annual report and the reasons that the amendments to the IPA were made.**

Being the first operational year of the Amendment 91 Inshore Salmon Savings Incentive Plan Agreement there are no annual changes to report. However, the Inshore SSIP, as previously mentioned, was amended mid-season of 2011. The amendments are as follows:

1. The definition of Trip Specific Transfers was changed to allow Trip Specific Transfers to originate from multiple vessels instead of a single vessel as defined in the original IPA.
2. Original language on "Monitoring and Reporting Salmon Credit Usage" has the following additional language inserted on the end of the final sentence of the original Agreement; "...**or as specifically authorized by the authorized representative of the Inshore Sector Cooperatives.**"
3. "Vessel Tier Assignments" was amended to track vessel bycatch rates for the "**prior 2 weeks**" instead of the prior 3 weeks as found in the original IPA. The 3 week period was written in error and should have originally been 2 weeks; a 2 week period is consistent with previous Rolling Hot Spot agreements.
4. The section on "Savings Area Designation Criteria" had no language changes from the original IPA, but there was an error in the original submission. "Exhibit 2" as referenced in this section was not included in original; that Exhibit 2 is now found at the end of the IPA with the other exhibits. Consequently Exhibits 2 and 3 in the original IPA are now labeled Exhibits 3 and 4.
5. "Savings Area Boundaries and Limitations" has had the reference to using only the "**A season**" bycatch history from 2000-2009 for Chinook Savings Area closures removed. This removal allows both A and B season bycatch history to be used in establishing the closure areas. Note that a reference to Exhibit 3 has been added to this paragraph as well.
6. "Compliance Agreement" is now referenced to Exhibit 4 as previously mentioned. Also note that all members to this IPA are currently members of inshore cooperatives. The original IPA included 2 participants that were not members of an inshore cooperative in 2010 when the original IPA was submitted, those IPA members, the Northwest Explorer and Leslie Lee, are now members of the Akutan and Unalaska Coops.
7. For the reasons mentioned above, the signature page no longer requires individual vessel signatures, only those from the representatives from the six inshore cooperatives, United Catcher Boats, and Sea State.

**Appendix 1.**

**Inshore Salmon Savings Incentive Plan Agreement**

**as amended in June 2011**

Report to the North Pacific Fishery Management Council  
on the 2011  
Bering Sea Pollock Intercooperative Salmon Avoidance  
Agreement

Karl Haflinger, Sea State Inc. - Intercoop Monitor  
John Gruver, AFA Catcher Vessel Intercooperative Manager

This report is to the North Pacific Fishery Management Council and covers the Bering Sea and Aleutian Islands Management Area (BSAI) Pollock Intercoop Salmon Avoidance Agreement ("ICA"). During the course of the B season fishery, the pollock Intercoop closed 67 areas to fishing based on high bycatch rates of chum salmon experienced by vessels working in the area. Maps of the closures are shown in Appendix 1.

Under the terms of the ICA, applicants are to submit to the Council a report analyzing:

1. Estimated number of salmon avoided as demonstrated by the movement of fishing effort away from salmon hot-spots.
2. A compliance/enforcement report that will include the results of an external audit designed to evaluate the accuracy of the approach used by Sea State to monitor compliance with the agreement, and a report on the effectiveness of enforcement measures stipulated under the ICA in cases of non-compliance. Examination of a randomly selected subset of vessel/days representing 10% of the catch during each season will be used as the basis of the audit.

**Number of non-Chinook salmon taken during the fishery:**

For the sake of comparison we have included catch and bycatch amounts running back to 1993. These data are compiled from plant landing information for catcher vessels delivering to shoreside processors, and observer data for mothership catcher vessels and catcher-processors. The "other salmon" category includes all non-chinook salmon.

Observer data for both offshore and shoreside deliveries show that only very small numbers of salmon other than chum in this category (for example, 152 unidentified, 31 pinks, and 5 silvers for the 2006B season EFP).

*Table 1. Catch and bycatch of pollock and salmon in the directed pollock fishery by season and for full years, 2000 – 2011.*

Year	B season pollock*	B season other salmon bycatch
1993	740,569	242,473
1994	718,582	89,117
1995	647,865	17,625
1996	633,639	77,028
1997	546,988	64,504
1998	539,432	60,040
1999	511,211	44,261
2000	631,755	57,228
2001	813,022	50,948
2002	866,034	83,033
2003	876,784	170,688
2004	858,799	427,234
2005	878,618	637,957
2006	874,435	276,779
2007	775,261	82,641
2008	572,384	14,453
2009	469,128	38,040
2010	471,983	13,585
2011	681,480	191,517

\* For the years 1993-1999, total groundfish from P and B targets, available on files from NMFS site (below), were used instead of pollock.

*Estimates of salmon bycatch for 1993-1999 are for all P and B trawl target fisheries, including CDQ, and are available on the NOAA Fisheries, Ak Region web site. (<http://www.fakr.noaa.gov/sustainablefisheries/catchstats.htm>)*

### **Evaluation of salmon savings.**

The evaluation of the number of salmon saved by the IC program is based on tracking vessels that fished in a closed area before it closed, and then comparing their subsequent bycatch to see if it was lower than expected if the area had not closed. Put more simply, we perform a before-and-after comparison of the bycatch observed and expected from the vessels that triggered the closure. The procedure is as follows:

1. Extract all observer data for haul locations falling inside a closure area, for a 5 day period preceding the closure. For shoreside catcher vessels, aggregate the hauls that have the same "start fishing date" so that hauls with the same bycatch rate are not artificially repeated. As an example, if 2 hauls from the same catcher vessel trip show up in the closed area, they will have the same bycatch rate because observers pro-rate bycatch evenly across all hauls. Consider them a single observation with a value equal to the sum of the two hauls' pollock and salmon.
2. Consider all of independent offshore sector (C/P and mothership) hauls, and combined "trip-level" hauls to be estimates of the bycatch ratio  $R_i = \sum y_i / \sum x_i$ , where y are counts of chinook or chum salmon, and x is the pollock catch from individual hauls (offshore sector) or grouped, same-trip hauls (shoreside), and i indicates a separate closure.
3. Extract the same haul or "grouped" haul information, for the same vessels, for the duration of the closure (either 3 or 4 days). Their associated bycatch is available from either observer or plant delivery information. Compute their expected bycatch had they been able to stay and fish inside the now-closed area, by summing the pollock catch of all vessels in this category, and multiplying this summed pollock catch by the matching bycatch ration,  $R_i$  above.
4. Compute the standard error of this estimated Y (overall salmon bycatch if vessels had stayed in the area and fished with bycatch rate R) treating R as a ratio estimator (Snedecor and Cochran, Statistical Methods, 8<sup>th</sup> Edition, p 452).

**Avoidance results from the 2011 Intercoop Agreement**  
 Locations of the 2011 closures are shown in Figure 1.

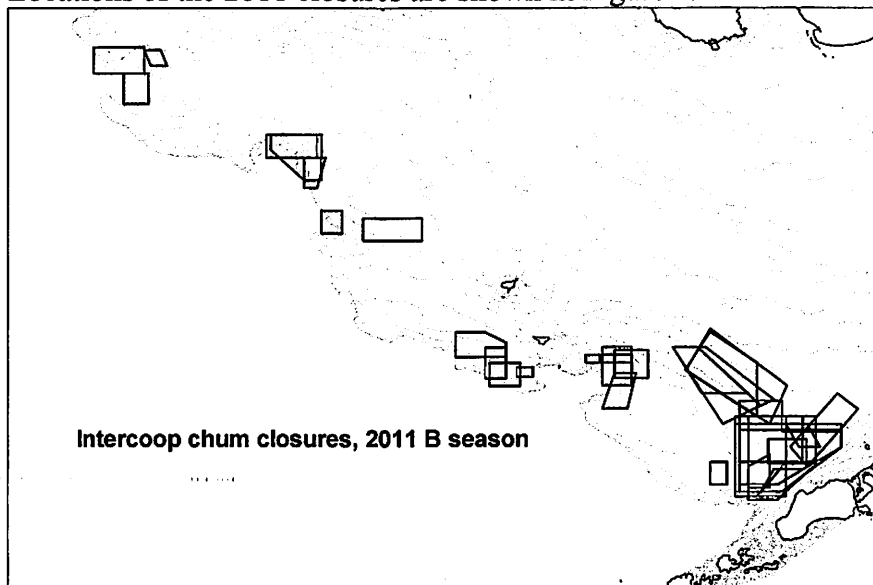


Figure 1. 2011 IC chum closures

Table 2 summarize of the results for both chum and chinook savings resulting from these closures (Appendix Tables A1a-c show the underlying data, by closure, with associated standard errors). An estimated 86,338 mt of observed groundfish was associated with boats that fished inside areas before they were closed. These same vessels caught an estimated 146,846 mt of groundfish in the five day interval following the respective closure. An estimated 79,657 fewer chum were taken outside the closures than would have been expected had the same amount of pollock been taken inside the closures, based on the comparison of rates inside and outside closure areas. Chinook reduction were minimal: 76 chinook fewer taken than the estimated 1,154 that would have been caught at within-closure rates. These bycatch reductions represent a 63% decrease in expected chum bycatch, and a 7% decrease in expected chinook bycatch.

Table 2. Chum salmon closure effectiveness

Closure statistic	Bycatch species	
	Chinook	Chum
Pollock catch (inside, before closures)	86,338	86,338
Pollock catch (outside, after closures)	146,846	146,846
Actual bycatch (outside closures)	1,078	46,939
Expected bycatch (at pre-closure rate)	1,154	126,596
Savings	76	79,657
% reduction	7%	63%

A comparison with results from chum closures from previous years is shown in Table 3. The "After-closure pollock" column shows the total tonnage of pollock harvested by vessels that fished inside closures in the 5-day interval before they closed. This amount of pollock can be viewed as having been moved from inside the closure area to outside due to the closures. The 2011 amount (146,846 mt) is larger as an absolute amount, and much larger as a percentage of the B season harvest, than we have seen in any other year since the program began. The number is higher than in any previous year partly because the ICA approved under the original Amendment 84 regulations was intended to protect both Chinook and chum salmon, with Chinook bycatch reduction being the higher priority. Therefore, chum RHS closures were discontinued once Chinook RHS closures were triggered. The implementation of Amendment 91 removed all Chinook elements of the original Amendment 84 regulations, thereby eliminating the replacement of chum RHS closures for those protecting Chinook salmon. Consequently the number of chum RHS closures, and therefore the associated pollock catch moved as a result of these closures, has increased in 2011.

*Table 3. Comparison of the effects of chum closures across years.*

Year	After-closure pollock	% of harvest affected	Chinook savings	Chinook % reduction	Chum savings	Chum % reduction
2006	23,049	3%	-97	-21%	65,299	64%
2007	107,646	14%	-----	56%	75,970	82%
2008	3,448	1%	53	82%	768	73%
2009	5,701	1%	52	50%	6,270	76%
2010	12,537	3%	61	85%	1,808	84%
2011	146,846	22%	73	7%	79,657	63%

### **Compliance/ Enforcement**

Ten apparent violations were referred to coops on November 2, 2011. The coops to which these vessels belong have until May 28, 2012 to meet and decide on the validity of these apparent violations.

An audit of Sea State compliance monitoring has again been awarded to ABR Inc of Fairbanks, Alaska. ABR reviewed 10% of the coop fishing records and associated VMS information. The draft report for this audit states that:

“We found that our verdicts agreed with Sea State’s determination in all cases. Our 10% subsample did not identify any errors in Sea State’s original determinations, and we did not further investigate locations outside of our subsample”

**Appendix 1. Before-and-after closure fishing comparisons, by closure.**

Date	"Before" closure pollock	"After" closure pollock catch	"After" closure chinook	Estimated chinook catch without closure	Chinook reduction (estimate-actual)	Std Err chinook estimate	"After" closure chum catch	Estimated chum catch without closure	Chum reduction (estimate-actual)	Std Err chum estimate	Number of samples prior to closure	Number of samples after closure
06/17/11	5,600	10,392	19	7	-11	1.7	6,309	9,803	3,494	492.2	37	41
06/21/11	22,103	10,576	10	18	8	2.3	3,452	6,833	3,381	392.6	138	45
06/24/11	3,207	5,600	3	9	6	1.5	1,805	3,294	1,489	271.2	31	24
06/28/11	326	2,035	1	6	5	1.0	1,599	2,170	571	103.8	7	7
07/01/11	1,249	1,352	0	2	2	0.2	114	1,813	1,699	36.8	23	4
07/05/11	403	1,499	1	6	5	1.1	250	2,352	2,102	169.2	8	8
07/05/11	670	3,619	0	0	0	0.0	120	3,556	3,436	79.1	11	4
07/08/11	3,003	3,506	3	9	6	2.4	2,405	5,252	2,847	737.2	20	18
07/12/11	746	2,178	5	0	-5	0.0	383	4,696	4,313	700.9	9	10
07/15/11	1,283	1,832	0	4	4	2.2	1,677	1,858	180	336.6	11	13
07/15/11	4,674	12,428	8	8	-1	1.0	2,436	6,147	3,710	209.0	56	36
07/19/11	382	77	0	0	0	0.0	883	329	-555	295.1	5	2
07/22/11	4,420	5,352	17	2	-15	1.0	751	2,190	1,438	247.8	32	29
07/22/11	5,519	13,104	10	2	-8	0.2	1,140	1,522	382	45.7	57	13
07/26/11	908	2,211	16	3	-13	0.6	156	397	239	21.5	12	9
07/26/11	720	5,150	19	0	-19	0.0	2,229	1,894	-335	182.9	7	6
07/29/11	420	1,176	11	14	3	3.3	327	288	-39	26.9	6	6
07/29/11	4,220	9,747	4	9	5	0.6	1,094	10,787	9,693	270.7	47	9
08/02/11	24	22	0	1	0		53	10	-44		1	1
08/02/11	30	152	1	1	0		17	6	-11		1	2
08/05/11	666	3,517	4	0	-4	0.0	630	2,624	1,994	312.0	8	6
08/09/11	2,889	4,420	7	14	7	2.4	1,980	7,465	5,485	934.5	32	28
08/12/11	3,276	6,977	53	7	-46	1.8	2,927	3,250	324	268.6	31	35
08/12/11	886	5,597	10	13	3	0.7	188	8,240	8,052	317.1	19	9
08/16/11	2,572	3,996	28	1	-28	0.2	1,026	2,021	995	61.7	48	16
08/19/11	5,220	4,419	56	22	-34	2.6	1,403	3,168	1,765	200.0	65	34
08/23/11	277	536	4	6	2	1.0	23	353	330	37.8	7	6
08/26/11	1,614	4,089	36	53	17	4.4	2,394	2,224	-170	119.3	28	19
08/30/11	1,985	3,235	49	10	-39	1.1	1,116	4,976	3,860	489.5	25	13
09/02/11	653	2,933	33	80	47	3.6	188	7,018	6,830	133.1	15	5
09/06/11	197	150	5	0	-5	0.0	87	590	502	44.4	2	1
09/09/11	86	294	27	1	-26		152	1,040	889		1	2
09/13/11	56	69	19	2	-18	1.5	34	89	55	2.9	2	2
09/16/11	1,861	1,679	234	231	-3	29.0	1,241	1,683	442	179.7	25	18
09/16/11	399	1,327	41	80	39	3.2	138	239	101	10.9	7	2
09/20/11	241	719	114	165	52	6.9	151	709	557	69.2	5	5
09/20/11	689	229	2	1	-1	0.6	979	485	-494	125.9	15	4
09/27/11	830	1,263	2	50	48	1.8	37	5,306	5,269	252.3	24	6
09/30/11	94	1,325	63	56	-7	3.2	214	1,815	1,601	24.4	4	4
09/30/11	582	775	8	5	-3	0.7	24	1,157	1,133	115.4	10	3
10/04/11	196	2,509	30	141	111	5.3	793	1,949	1,156	30.6	4	4
10/07/11	174	1,521	43	96	53	5.5	253	1,029	776	18.4	3	3
10/11/11	23	346	4	0	-4		38	90	52		1	1
10/11/11	880	1,929	49	4	-45	0.6	77	2,475	2,398	129.7	11	5
10/14/11	60	397	3	0	-3		17	173	156		1	1
10/21/11	43	588	24	14	-10	0.7	3,628	1,235	-2,393	24.7	2	2
	86,338	146,846	1,078	1,154	76		46,939	126,596	79,657			



## Appendix 2: Dirty 20 list appearances

Number of times each vessel was on a 2011 chum weekly dirty 20 list

Vessel	N times on list	Vessel	N times on list	Vessel	N times on list
AJ	0	Golden Alaska	0	PACIFIC CHALLENGER - MS	4
Alaska Ocean	3	GOLDEN DAWN	5	PACIFIC EXPLORER	3
ALASKA ROSE	3	GOLDEN PISCES	1	PACIFIC FURY	6
ALASKAN COMMAND	8	GREAT PACIFIC	4	Pacific Glacier	0
ALDEBARAN	3	GUN-MAR	5	PACIFIC KNIGHT	0
ALEUTIAN CHALLENGER	1	HALF MOON BAY	0	PACIFIC MONARCH	0
ALSEA	5	HAZEL LORRAINE	0	PACIFIC PRINCE	5
ALYESKA	0	HICKORY WIND	1	PACIFIC RAM	0
AMERICAN BEAUTY - INSHORE	2	Highland Light	0	PACIFIC VIKING	6
AMERICAN BEAUTY - MS	1	INTREPID EXPLORER	0	PAPADO II	0
AMERICAN CHALLENGER	0	Island Enterprise	4	PEGASUS	3
American Challenger	0	Katie Ann	0	PEGGY JO	0
American Dynasty	3	Kodiak Enterprise	4	PERSEVERANCE	0
AMERICAN EAGLE	4	LESLIE LEE	1	POSEIDON	2
American Enterprise	0	LISA MELINDA	0	PREDATOR	1
American Triumph	1	MAJESTY	0	PROGRESS	4
ANITA J	3	MARCY J	1	PROVIDIAN	0
ARCTIC EXPLORER	9	MARGARET LYN	0	RAVEN	0
Arctic Fjord	1	MAR-GUN	0	ROYAL AMERICAN	4
Arctic Storm	0	MARK I	7	ROYAL ATLANTIC	2
ARCTIC WIND	6	MESSIAH	0	SEA STORM	0
ARCTURUS	7	MISS BERDIE	0	Sea Storm	0
ARGOSY	4	MISTY DAWN	3	SEA WOLF	1
AURIGA	3	MORNING STAR	6	SEADAWN	6
AURORA	4	MS AMY	0	Seattle Enterprise	2
BERING ROSE	6	MUIR MILACH	0	SEEKER	2
BLUE FOX	4	Muir Milach	0	SOVEREIGNTY	6
BRISTOL EXPLORER	5	NEAHKAHNE	0	Starbound	3
CAITLIN ANN	5	Neahkahnie	0	STARFISH	6
CALIFORNIA HORIZON	3	NORDIC EXPLORER	0	STARLITE	3
CAPE KIWANDA	2	NORDIC FURY - INSHORE	1	STARWARD	4
CHELSEA K	7	NORDIC FURY - MS	5	STORM PETREL	1
COLLIER BROTHERS	6	NORDIC STAR	6	SUNSET BAY	0
COLUMBIA	3	Northern Eagle	2	TOPAZ	0
COMMODORE	2	Northern Glacier	0	TRACY ANNE	0
DEFENDER	5	Northern Hawk	2	Tracy Anne	0
DESTINATION	3	Northern Jaeger	3	TRAVELER - INSHORE	0
DOMINATOR	3	NORTHERN PATRIOT	9	TRAVELER - MS	3
DONA MARTITA	0	NORTHWEST EXPLORER	0	US Enterprise	0
ELIZABETH F	1	OCEAN EXPLORER	2	VANGUARD - INSHORE	0
Endurance	0	OCEAN HARVESTER	0	VANGUARD - MS	2
EXCALIBUR II	2	Ocean Harvester	0	VESTERAALEN	7
Excellence	0	OCEAN HOPE 3	0	VIKING	8
EXODUS	0	OCEAN LEADER - INSHORE	1	VIKING EXPLORER	6
FIERCE ALLEGIANCE	3	OCEAN LEADER - MS	5	WALTER N	2
FORUM STAR	0	Ocean Phoenix	0	WESTERN DAWN - INSHORE	1
Forum Star	0	Ocean Rover	2	WESTERN DAWN - MS	1
GLADIATOR	2	OCEANIC	5	WESTWARD I	3
GOLD RUSH	1	PACIFIC CHALLENGER - INSHORE	0		

**Alaska Groundfish Cooperative**  
**Report to the North Pacific**  
**Fishery Management Council**  
**for the 2011 Fishery**

20 March 2012

**Introduction**

On January 20<sup>th</sup> 2011, the Alaska Groundfish Cooperative (AGC) began fishing under regulations implementing Amendment 80. This report summarizes AGC operations during 2011.

**AGC membership**

AGC membership includes the following four companies, and nine non-AFA trawl catcher processors and/or permits.

Company	Vessel/Permit	LLP LOA
Arctic Sole Seafoods, Inc.	Ocean Cape	122
Iquique U.S., L.L.C.	Tremont	125
O'Hara Corporation	Harvester Enterprise	181
The Fishing Company of Alaska, Inc.	Alaska Juris	238
	Alaska Spirit	221
	Alaska Victory	227
	Alaska Warrior	215
	Alaska Ranger	203
	Alaska Voyager	228

### **Co-op Management**

The AGC co-op manager is responsible for the management of the cooperative. This includes communications, regulatory compliance, catch and bycatch tracking, and QS management.

Transfers occurred during the year between co-op members, and between Am 80 cooperatives.

2011 was the first year for the Alaska Groundfish Cooperative. Due to events beyond our control, we did not have as many fishing days as we were expecting. With the experience gained in the 2011 fishery, we anticipate increased efficiencies during the 2012 fishery.

### **Catch Monitoring**

The AGC manager receives observer data from the vessels fishing. Catch and species composition information is received from the Observer Program, and from NMFS Alaska Region. Production information is received from Alaska Region. All of these sources are used to ensure that the vessels do not exceed quotas. Software on the vessels allows the Captains to keep close track of quota usage.

Seastate, Inc. also monitors AGC catch and production, and the co-op manager is able to compare information through a secure web site to ensure any possible errors are caught and resolved.

### **GOA Sideboards**

Some AGC vessels participated in the Rockfish Pilot Program Co-op fishery in the CGOA. These vessels are sideboarded under the rockfish program. One AGC vessel participated in the WGOA Am 80 rockfish sideboard fishery. No sideboard limits were exceeded.

## 2011 AGC Catch

The following tables provide AGC catch information. Data has been rounded to the nearest whole number. All co-op catch during 2011 fell within allocation levels and no overages occurred.

*BSAI AGC Allocated Quota & PSC and Catch Amounts*

Species	AGC Am 80 Allocation (mt)	AGC Catch (mt)	Total Transfer Amounts (mt)
Mackerel 541	19,181	19,142	
Mackerel 542	5,389	5,128	
Mackerel 543	755	183	
Flathead Sole	6,269	460	3,940
Pacific Cod	5,079	3,600	1,034
POP 541	2,364	2,332	
POP 542	2,078	2,054	
POP 543	3,879	3,835	
Rock Sole	19,902	5,071	4,573
Yellowfin Sole	59,798	21,487	8,737
Bairdi Z1 (#)	174,839	54,801	35,137
Bairdi Z2 (#)	407,987	297,279	80,641
Halibut Mortality (mt)	732	488	205
COBLZ Opilio (#)	1,834,026	274,157	197,479
Red King Crab (#)	41,602	6,407	6,274

*BSAI Salmon Catch Amounts*

<b>Species</b>	<b>AGC Catch (#)</b>
Chinook	0
Non-Chinook	270



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February 26, 2012

## 2011 Groundfish Retention by the Alaska Groundfish Cooperative

### Materials and Methods:

Observer data was supplied to Sea State, Inc via the Northwest Groundfish Observer Program's password-protected web site. Logon credentials were supplied by all members of the Alaska Groundfish Cooperative. Production data were obtained via the NMFS Alaska Region e-Landings system, again using credentials supplied by member companies. Unsampled hauls in the observer data were extrapolated using standard methods documented by NMFS Alaska Region to produce total groundfish catch estimates in accord with those in the Alaska Region Catch Accounting System. Production data were processed using published Product Recovery Rates (PRRs). Groundfish retention was then calculated according to the formula:

$$\text{Retention percentage} = \text{Retained catch (retained product RWE)} / \text{Total catch (CAS)}$$

The coop-wide retention percentage (all vessels' groundfish catch and retained product data pooled) was 87.6%

NPFC  
AGENDA ITEM C-1(c)

MARCH 28, 2012

Draft

Chinook Salmon Bycatch Reduction  
Incentive Plan Report 2011

NMFS IPA No. \_\_CP IPA\_\_

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March 28, 2012



## Introduction

Amendment 91 to the Bering Sea and Aleutian Islands Groundfish Fishery Management Plan (BSAI FMP) limits Chinook salmon bycatch in the eastern Bering Sea (EBS) pollock fishery. The rules and regulations implementing Amendment 91 came into force at the start of the 2011 fishery. Amendment 91 is an innovative approach to managing Chinook salmon bycatch in that it combines a prohibited species catch (PSC) limit on the amount of Chinook salmon that may be caught incidentally by the fishery with an incentive plan agreement (IPA) and performance-standard requirement designed to minimize bycatch to the extent practicable in all years. The approach is designed to motivate fishery participants to avoid Chinook salmon bycatch at the individual vessel level under any condition of pollock and Chinook abundance in all years. The vessel-level incentives are created through contracts among the fishery participants.

The Chinook Salmon Bycatch Reduction Incentive Plan (CP IPA) reported on here is designed to provide the incentives necessary to accomplish the goals and objectives of Amendment 91. The plan builds on experience gained in the development and refinement of time-and-area-based, rolling "hot-spot" avoidance programs. The plan creates incentives to avoid salmon bycatch by restricting the pollock fishing opportunities of vessels with poor Chinook bycatch performance while allowing vessels with good performance less restricted access to the fishing grounds. Losing access to good pollock fishing increases vessel operating costs and reduces product values. Avoiding grounds restrictions reduces operating costs and allows for the production of more high-value products (especially during the A-season), thus increasing profits.

The incentive plan is designed to work in concert with the annual Chinook salmon PSC limits specified in Amendment 91. The limits depend on whether the fishery participants develop IPAs. If IPAs are developed, then the annual limit is 60,000 Chinook during any two-out-of-seven years, and 47,591 Chinook in other years. During 2011 all pollock vessels participated in an IPA and the catcher-processor (CP) sector IPA participants included vessels harvesting the American Fisheries Act (AFA) CP Sector and Alaska Community Development Quota (CDQ) pollock allocations. For the CP sector, the Chinook quota was 13,516 fish and the pollock quota was 36 percent of the non-CDQ directed fishing allocation. For the CDQ sector, the Chinook quota was 3,883 fish and the pollock quota was 10 percent of the annual directed fishing allocation. These pollock and Chinook quotas were further allocated among the seasons and the participating vessels. Table 1 shows the CP IPA 2011 "day-one" allocations of pollock and Chinook salmon PSC quota.

Primary IPA components include: (1) data gathering, monitoring, reporting, and information sharing; (2) identification of bycatch avoidance areas (BAA); and (3) fishing-area prohibitions for vessels with poor bycatch performance. Additional components include: (1) an A-season closed area of approximately 755 square nautical miles on the northern flank of the Bering Canyon; and (2) a set of conditional, B-season closed areas of approximately 1,295 square miles along the outermost EBS shelf. Vessels are prohibited from fishing in the B-season areas beginning on October 15th and

continuing through to the end of the season during those years when the aggregate bycatch of all plan vessels during the month of September exceeds a preset threshold.

Table 1. CP IPA Day-One Allocations of Pollock and Chinook Salmon, 2011.

Vessel	Pollock (tons)	Chinook Salmon (n)
American Dynasty	41,737	1,318
American Triumph	41,737	1,318
Northern Eagle	41,737	1,318
Northern Jaeger	41,737	1,318
Ocean Rover	41,737	1,317
Arctic Fjord	44,766	1,205
Arctic Storm	38,433	1,271
Northern Hawk	59,316	1,378
Alaska Ocean	48,260	1,432
Pacific Glacier	47,745	1,433
Starbound	41,498	1,259
Island Enterprise	26,250	772
Kodiak Enterprise	26,250	772
Seattle Enterprise	26,250	772
Ocean Peace	1,327	66
Northern Glacier	515	3
Allocation Buffer	0	447
Total Allocation	569,295	17,399

### Incentive Measures

One of the most practical and direct methods to create incentives to avoid Chinook salmon bycatch is to limit the pollock fishing opportunities of a vessel when bycatch performance is poor. This simple approach works especially well for catcher-processors because efficient processing requires an uninterrupted flow of fish, and this can be achieved most reliably with unrestricted access to the grounds. Because experience has shown that high, local concentrations of pollock may often be found where concentrations of Chinook are also high (the vessels can "see" the pollock but not the Chinook). As such, limiting access to local areas of relatively high Chinook bycatch is an efficient way to create a financial incentive to avoid Chinook salmon bycatch. The reason for this is that losing access to good pollock fishing grounds increases vessel operating costs and reduces the amount of products that can be produced during a day of fishing. A vessel that retains nearly unrestricted access to good pollock fishing

opportunities avoids costs associated with moving and finding pollock in other areas, and so the vessel can produce more products each day.

About a decade of industry experience has shown that the most efficient way to reduce salmon bycatch to the maximum extent practicable is to focus incentive programs on those areas where Chinook salmon bycatch is highest when compared to the amount of pollock harvested. To accomplish this, vessel performance benchmarks are calculated in a way that reflects the amount of pollock harvested. The first step in creating a program to avoid Chinook bycatch is to employ data gathering, reporting, and information sharing to identify local areas of relatively high Chinook abundance on the pollock grounds. Pollock catch and Chinook bycatch records from all fishery participants are gathered, compiled, and evaluated each week during which a plan vessel harvests pollock. In this analysis areas of relatively high Chinook bycatch are identified (bycatch avoidance areas; BAA). Should vessels continue to fish in these areas, high Chinook bycatch is likely to occur because local concentrations of Chinook routinely persist for several weeks in time and space.

More information about the methods used to identify the BAA is provided in the CP IPA agreement available at: ([www.fakr.noaa.gov/sustainablefisheries/bycatch/salmon/chinook/ipa/chinook\\_salmon\\_ipa\\_2010.pdf](http://www.fakr.noaa.gov/sustainablefisheries/bycatch/salmon/chinook/ipa/chinook_salmon_ipa_2010.pdf)). An important component the evaluation of potential BAA is the generation of a useful grounds-wide index of salmon abundance. This "baseline" index of relative salmon abundance on the grounds over time is called the base rate. The base rate also takes into consideration the amount pollock harvested.

To establish and maintain incentives to avoid Chinook bycatch under any condition of pollock and Chinook salmon abundance, the bycatch performance of the IPA vessels is measured both currently (most recent two weeks) and cumulatively (over the entire fishing season). To evaluate current performance, vessel performance is measured during the prior two weeks and compared to a standard that represents better-than-average performance. The measure of current vessel bycatch performance is called the vessel bycatch ratio. The bycatch ratio is calculated by dividing the number of Chinook caught incidentally by the vessel during the prior two weeks by the metric tons of pollock harvested by the vessel during the prior two weeks. A two week period is used because experience has shown that day-to-day vessel bycatch performance is influenced by random factors associated with changes in weather, winds, water temperatures, and currents, and measuring performance over a two-week period "dampens" the effects of these random influences, so increasing the usefulness of this measure of performance in the creation of an incentive for the individual vessel to avoid bycatch.

If the current bycatch performance of a plan vessel is not better than average, then the vessel is prohibited from fishing in the BAA for a week. Because the base rate is calculated by aggregating pollock catch and bycatch data from all vessels fishing for pollock, the base rate provides a measure of the average bycatch performance of the vessels fishing for pollock. The plan establishes the better-than-average-performance standard at 75 percent of the base rate. So every plan vessel with current bycatch performance higher than 75 percent of the base rate is prohibited from fishing within

the BAA for seven days (i.e., the following week). If during the following week the current bycatch performance of a vessel operating under a fishing prohibition remains higher than 75 percent of the base rate, then the vessel is prohibited again from fishing in the bycatch avoidance areas for an additional seven days. A seven-day fishing prohibition is called a weekly fishing prohibition.

The cumulative bycatch performance of a vessel is measured as the total amount (number) of Chinook salmon bycatch by the vessel during the fishing year relative to the pollock allocation assigned to that vessel (Table 1 shows the day-one" assignments for 2011). So the measure of cumulative vessel performance accumulates from the first day of fishing through to the last. Vessel cumulative bycatch performance is evaluated against a standard designed to magnify the incentive to avoid salmon bycatch during years when the baseline abundance of Chinook is medium and high. Based on analysis of more than a decade of catcher-processor catch records an annual bycatch of 8,500 Chinook indicates a year when Chinook abundance on the grounds traditionally fished by catcher-processors is at a medium level.

Cumulative bycatch performance is evaluated only for those plan vessels that receive a weekly fishing prohibition. For these vessels, if the cumulative Chinook bycatch rate is higher than the medium-abundance standard, then the vessel is prohibited from fishing in the BAA for two weeks. This standard is called the vessel cumulative amount, and a fourteen-day fishing prohibition is called an extended fishing prohibition. If vessel Chinook bycatch is greater than its cumulative amount, then it is subject to the extended fishing prohibition. Additional information about how the vessel cumulative amount is determined may be found in the CP IPA agreement.

### Chinook Salmon Conservation Areas

Chinook salmon feeding migrations produce concentrations of Chinook in discrete, local areas along the EBS outer continental shelf, and many of these areas are well known to pollock fishermen. The areas are known to pollock fishermen because more often than not high concentrations of pollock are found in the areas. However, the precise times during which pollock and Chinook may be concentrated in any local area depends on a host of environmental and physical-oceanographic conditions that change with the seasons and the weather, such that it is not generally possible to know precisely where pollock and Chinook are concentrated together before going fishing for pollock.

Analysis of catch records over a decade or more has revealed the existence of one area along the outer continental shelf within which it seems that high concentrations of Chinook salmon exist almost every year during the winter fishery. Based on this analysis, an A-season fishing prohibition within an approximately 735 square mile area is included in the plan as a means to reduce bycatch. The area is called the A-season Chinook Salmon Conservation Area (CSCA).

Analysis of B season catch records over two decades shows that when migrating Chinook arrive on the outer continental shelf in sufficient numbers during September,

the odds that high concentrations of Chinook will be encountered by the fishery in October appear to increase. To create an incentive to reduce bycatch during the latter portion of the B-season, the CP IPA includes "triggered" fishing prohibition for three areas of approximately 1,295 square miles along the outermost shelf. These areas are called the B-season Chinook Salmon Conservation Area. To implement the incentive, all vessels are prohibited from fishing in the areas beginning on October 15th and continuing through to the end of the season during those years when the aggregate bycatch rate for all vessels during the month of September exceeds 0.015 Chinook per metric ton of pollock harvest (n/t; hereafter metric tons are referred to simply as tons). Maps of these Chinook Salmon Conservation Areas and the latitude and longitude coordinates of their boundaries are provided in the CP IPA agreement. The CP IPA also specifies the penalties levied on a vessel for violating a BAA prohibition or fishing in a Chinook Salmon Conservation Area when fishing there is prohibited. These penalties are \$10,000 for the first annual violation, \$15,000 for a second annual violation, and \$20,000 for a third and each subsequent violation during a year, with every trawl inside a prohibited area considered a separate violation.



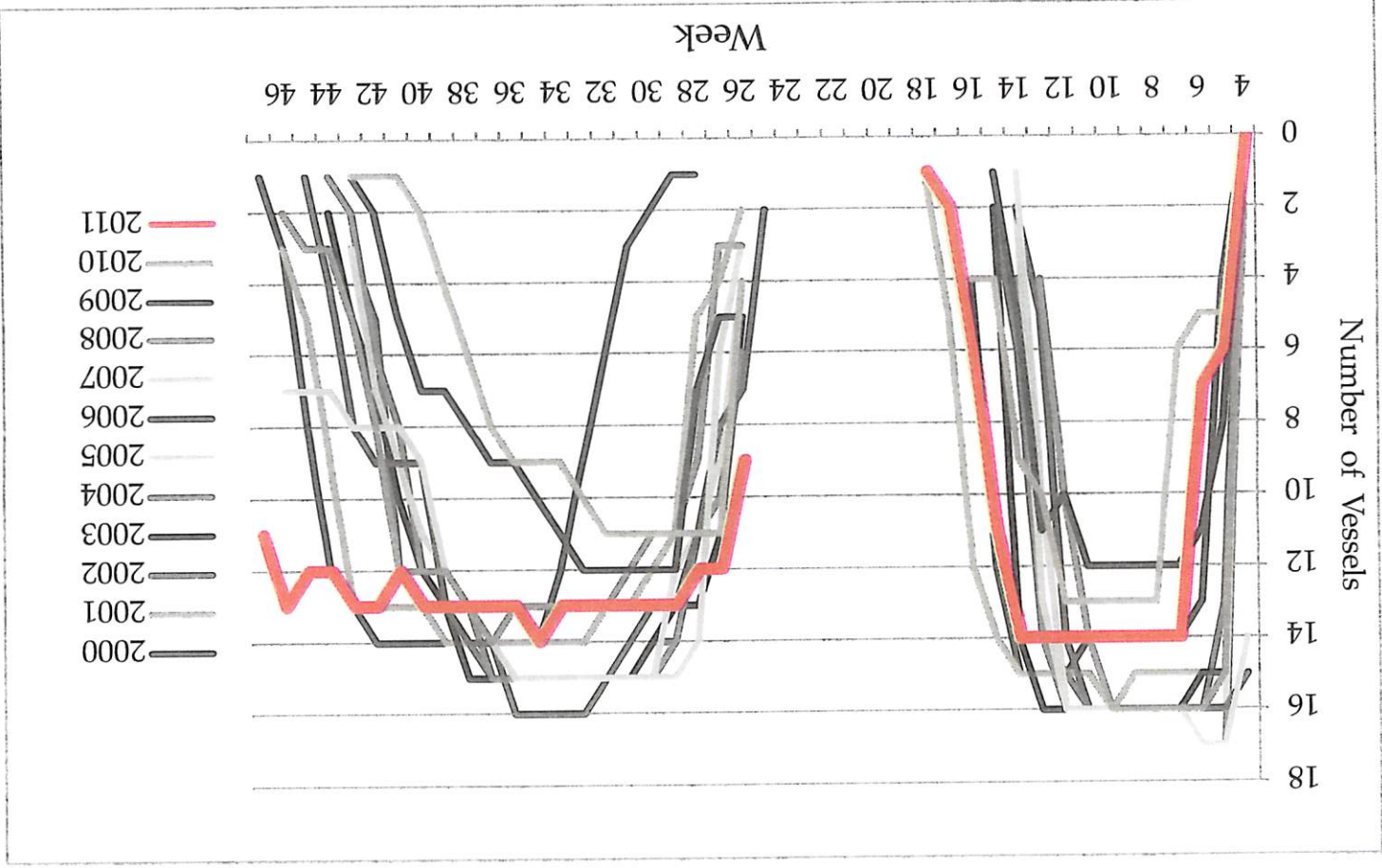


Figure 3. Number of CP IPA Vessels in the Pollock Fishery by Week, 2000-2011.

Table 3. CP IPA Pollock Catch and Chinook Bycatch Performance by Season and Vessel, 2011.

Vessel	A-Season Pollock (t)	Chinook Salmon A (n)	B-Season Pollock (t)	Chinook Salmon B (n)	A-Season Ratio (n/t)	B-Season Ratio (n/t)
American Dynasty	16,897	216	26,645	169	0.013	0.006
American Triumph	16,356	150	26,910	123	0.009	0.005
Northern Eagle	16,467	140	12,620	230	0.009	0.018
Northern Jaeger	16,032	90	23,799	154	0.006	0.006
Ocean Rover	16,660	127	24,922	98	0.008	0.004
Arctic Fjord	19,448	189	25,979	237	0.010	0.009
Arctic Storm	14,088	122	23,681	30	0.009	0.001
Northern Hawk	21,664	170	26,446	150	0.008	0.006
Alaska Ocean	22,290	255	29,799	149	0.011	0.005
Northern Glacier	485	22	1,446	16	0.045	0.011
Pacific Glacier	15,857	128	24,713	101	0.008	0.004
Starbound	14,454	185	22,249	147	0.013	0.007
Island Enterprise	11,105	143	21,023	184	0.013	0.009
Kodiak Enterprise	11,154	153	16,204	187	0.014	0.012
Seattle Enterprise	11,253	146	9,860	11	0.013	0.001
Ocean Peace	0	0	0	0		
Forum Star	0	0	0	0		
American Challenger	0	0	0	0		
Ocean Harvester	0	0	0	0		
Tracy Anne	0	0	0	0		
Neahkanie	0	0	0	0		
Sea Storm	0	0	0	0		
Muir Milach	0	0	0	0		
Total	224,209	2,236	316,296	1,986	Mean 0.010	0.006