

ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON FISHERIES

March 9, 2017

10:02 a.m.

MEMBERS PRESENT

Representative Louise Stutes, Chair
Representative Zach Fansler
Representative Jonathan Kreiss-Tomkins
Representative Geran Tarr
Representative Mike Chenault
Representative David Eastman
Representative Mark Neuman

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION: "BYCATCH"

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

GLENN MERRILL, Assistant Regional Administrator
National Marine Fisheries Service (NMFS)
National Oceanic and Atmospheric Administration (NOAA)
Juneau, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

CHRIS OLIVER, Executive Director
North Pacific Fishery Management Council (NPFMC)
Anchorage, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

SAM COTTEN, Commissioner
Alaska Department of Fish & Game (ADF&G)
Juneau, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

TRENT HARTILL, Federal Fisheries Coordinator
Alaska Department of Fish & Game (ADF&G)
Juneau, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

CHRIS WOODLEY, Executive Director
Groundfish Forum, Inc.
Seattle, Washington

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

BRENT PAINE, Executive Director
United Catcher Boats Association
Seattle, Washington

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

STEPHANIE MADSEN, Executive Director
At-Sea Processors Association (APA)
Juneau, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

JULIE BONNEY, Vice-President
Alaska Groundfish Data Bank
Kodiak Chamber of Commerce
Kodiak, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

LINDA BEHNKEN, Executive Director
Alaska Longline Fishermen's Association (ALFA)
Sitka, Alaska

POSITION STATEMENT: Participated in the comprehensive overview on bycatch.

ACTION NARRATIVE

[10:02:15 AM](#)

CHAIR LOUISE STUTES called the House Special Committee on Fisheries meeting to order at 10:02 a.m. Representatives

Stutes, Neuman, Eastman, and Fansler were present at the call to order. Representatives Tarr, Chenault and Kreiss-Tomkins arrived as the meeting was in progress.

[10:03:00 AM](#)

PRESENTATION: "BYCATCH"

CHAIR STUTES announced that the only order of business would be a comprehensive presentation from state and federal agencies, as well as related private industry, on the topic of "bycatch."

[10:04:05 AM](#)

GLENN MERRILL, Assistant Regional Administrator, National Marine Fisheries Service (NMFS), described and defined bycatch as held in the Magnuson-Stevens Fishery Conservation and Management Act (MSA), 1976, quoting, "... fish which are harvested in a fishery, but are not sold or kept for personal use, or includes economic discards and regulatory discards ...". Bycatch is a standard occurrence in all fisheries, both sport and commercial, regardless of gear type, area fished, or time of harvest, but the amount and type of bycatch varies. The economic discard bycatch is made up of fish which are of poor quality, don't represent a marketable species, or for other reasons, and is a representatively small category. The majority of discard bycatch are regulatory discards meaning they are caught on a gear type that is not allowed for the species, are taken out of season, do not meet size requirements, or due to other state or federal regulations. He explained that two management considerations are applied to bycatch situations: the benefits and costs to fishermen, and the impacts on fish stocks. Reducing bycatch can increase the harvest for some fishermen as well as reduce stock impacts; however, it generally represents a trade off because reducing the bycatch of a comingled species often causes a reduced harvest of the target fishery. Also, the cost of reducing bycatch in one fishery may not be offset by the ability to substantially improve a stock. The MSA requires the minimization of bycatch and bycatch mortality. Thus, anytime a federal action is adopted, ten required considerations are applied, four of which, as stated in the act, establish measures for: minimizing bycatch and bycatch mortality to the extent practicable; achieving the optimum yield from each fishery; fair and equitable allocation; and sustained participation of communities.

[10:08:02 AM](#)

MR. MERRILL said the main types of bycatch that occur in Alaska's federal fisheries are groundfish bycatch, which is basically the catch of anything except halibut, salmon, herring, and shellfish; halibut bycatch; and salmon bycatch, particularly Chinook salmon. He referred to the committee handout, titled, "NOAA Fisheries Alaska Region, Alaska State Legislature House Fisheries Committee Presentation: Bycatch, March 9, 2016," the page labeled, "2016 Groundfish Catch by Gear in Federal Fisheries Off Alaska," and the bar graphs indicating metric ton levels of groundfish by gear type to illustrate the bycatch in relation to the retained catch. He pointed out that, of the roughly two million metric tons taken by the trawl fisheries, 98 percent of the catch is retained. Discards include pollock, and arrowtooth flounder, as well as non-marketable species such as skates, sculpins, and some species of rockfish. The hook-and-line gear fishery harvested about 150,000 metric tons and retained 81 percent of the catch. The discards in this gear type include Pacific cod, and sablefish. The pot gear fishery harvested about 50,000 metric tons, and retained 96 percent of the catch. The overall percentage of bycatch represents a minimal proportion of the catch discarded on an annual basis, he said. He reviewed the subsequent page of the handout labeled, "2003-2016 Halibut Bycatch Of Alaska," which provided a line chart of the metric tons of halibut taken in the Bering Sea Aleutian Island (BSAI) and Gulf of Alaska (GOA) trawl and hook-and-line fisheries, as well as a line charting the halibut bycatch for the time period graphed. The indications are that halibut bycatch is at an all-time low, slightly less than 4,000 metric tons, which, he said, can be attributed to a number of management actions that have been implemented by NMFS and the North Pacific Fishery Management Council (NPFMC), as well as industry initiatives. On the continuing page of the handout, he reviewed a pie chart, labeled, "2016 Halibut Bycatch as a Percentage of All Halibut Catch," illustrating the federal allotment of the halibut catch by category percentages: bycatch 17, commercial landings 60, recreational 17, personal use and subsistence 3, and waste in commercial landings 3.

MR. MERRILL said the genetic composition of Chinook salmon bycatch is of particular interest, and an annual review focuses on identifying the origins of the stock. He directed attention to a map in the handout labeled, "Chinook Salmon Genetic Composition Areas," illustrating the specific locales used to define the origins of each of the genetically unique Chinook salmon stocks taken as bycatch in the Alaskan fisheries. The line graph and pie chart on the subsequent page, labeled, "2003-

2016 Gulf of Alaska Chinook Salmon Bycatch," provided a line graph to illustrate the number of Chinook bycatch that occurred in the GOA. The last few years have seen reductions in the bycatch levels, which he attributed to management practices and fleet efforts. The pie chart, on the same page, provided percentages of genetic composition estimates from the 2014 pollock fishery for Chinook salmon bycatch taken in the GOA pollock fishery, and reported that approximately 6 percent of the bycatch have been determined as bound for other areas, outside of the gulf. Roughly 5 percent are from fish originating in the Kodiak and Cook Inlet Rivers. Nearly 80 percent of the bycatch represent stocks out of British Columbia, the Lower 48, or Southeast Alaska.

[10:14:31 AM](#)

MR. MERRILL said the story of Chinook in the Bering Sea is significantly different, and turned to the handout page labeled, "2003-1016 Bering Sea Chinook Salmon Bycatch," to review a line graph and pie chart reflecting the findings for the origins of salmon taken in the Bering Sea. He pointed out that about 44 percent of all Chinook salmon caught are bound for the river systems of coastal, Western Alaska and the Yukon River. The proportion of the bycatch associated with the pollock fishery shows that less than 3 percent of Chinook and 1 percent of chum salmon are returning to the watersheds of Western Alaska and the Yukon River. He said controls are placed on halibut and salmon bycatch using regulatory and non-regulatory measures. The regulatory measures include the following: use of bycatch caps to close or modify the fisheries; closure of areas based on migration patterns; specific gear limitations for some fisheries; catch share management practices to allocate quota to individual fishermen and eliminate the need for fleet members to "race for fish," which encourages information sharing and better fishing practices; Bering Sea bycatch caps linked to Western Alaska returns to provide management flexibility based on stock abundance; issuance of experimental fishing permits to allow deck sorting of catch to get the halibut back into the sea quickly, within 20-30 minutes, which reduces mortality; and constant communication with the fleet to aide vessels in avoiding bycatch hot spots and unify the fishing effort. The industry is also involved in an effort, through voluntary cooperatives, to avoid reaching bycatch caps and having a fishery shut down. Voluntary measures practiced by the fleet include use of special gear with excluder devices, as well as standing down when bycatch species are in high abundance.

[10:19:33 AM](#)

MR. MERRILL discussed measures being considered to continue lowering bycatch numbers, which include: linking halibut bycatch caps to abundance reports; regulating deck sorting of halibut in all waters off of Alaska; improving fleet communications regarding bycatch hot spots; encouraging additional industry efforts for voluntary cooperatives and stand down practices; facilitating catch-share programs supported by the NPFMC; and constantly evaluating the performance. The annual reports provide a constant flow of information in order to affect improvements. He directed attention to the final page of the handout to invite the members and the public to visit the listed websites.

The committee took an at-ease from 10:21 a.m. to 10:22 a.m.

[10:22:53 AM](#)

CHRIS OLIVER, Executive Director, North Pacific Fishery Management Council (NPFMC), said the Magnuson-Stevens Fishery Conservation and Management Act (MSA), 1976, is the over-arching law for managing fisheries in federal waters by establishing the 200 nautical mile exclusive economic zone, and the system of regional councils comprised of fishermen and government agency representatives to develop fishery regulations for their specific areas, as subject to approval and implementation by the federal government, such as the National Marine Fisheries Service (NMFS). He highlighted two of the MSA national standards for use in the bycatch context being discussed: 1) prevent overfishing while achieving optimum yield from the fishery, and 2) minimize bycatch and bycatch mortality. Meeting these two standards requires a delicate balancing act, he said, and creates a constant tension for achievement in both trawl and hook-and-line fleets.

[10:24:58 AM](#)

MR. OLIVER explained the structure, function, and process under which the NPFMC operates. It seats 11 voting members, six of whom are from Alaska, notably the commissioner of the Alaska Department of Fish & Game (ADF&G). He said the council meets 5-6 times per year, concurrent with its advisory groups, which include an industry advisory panel, a scientific and statistical committee, and numerous other committees which provide advice on issues, not unlike the Board of Fisheries. He directed attention to the committee packet handout titled, "The North

Pacific Council and Recent Measures to Minimize Halibut and Salmon Bycatch, A presentation for the Alaska House Fisheries Committee," the page labeled "Council membership," and pointed out the make-up of the current membership. Reviewing who manages the fisheries of Alaska, he said salmon are under state purview, crab is a collaboration of federal and state oversight, groundfish are under federal purview, and halibut are governed under an international treaty between the U.S. and Canada.

[10:26:28 AM](#)

MR. OLIVER stressed the critical elements of the ecosystem based approach to fisheries in the North Pacific, which is conservative and imposes strict target catch and bycatch limits. An important component of managing the effort is the comprehensive observer program. In 2015, the Bering Sea and Aleutian Islands (BSAI) and the Gulf of Alaska (GOA) groundfish/halibut fisheries implemented a mandatory full coverage observer program, at a cost to industry of \$15 million. Certain vessels are allowed to operate under partial coverage. Electronic monitoring is being implemented as an alternative on some longline and pot catcher vessels. He explained that bycatch controls impose caps on prohibited species, which are a fundamental key to the management process. The council also encourages industry efforts to reduce bycatch through gear modifications, communications, and fleet agreements.

[10:28:39 AM](#)

MR. OLIVER spoke specifically to the BSAI salmon bycatch and said the Bering Sea pollock fishery is under a 60,000 Chinook salmon limit, with an incentive plan, implemented in 2011, to remain below 47,591. Modifications were made in April 2015, which included imposing more stringent incentive plan requirements to include salmon excluder devices, and lowering bycatch caps in years of low Chinook abundance. He said these changes were coupled with the previous BSAI provisions that included 100 percent observer coverage, complete census of all salmon species by observers, increased genetic sampling for stock of origin in both the BSAI and GOA fisheries, annual reports to the council on genetic stock of origin results from the fisheries, and annual reports on effectiveness of the incentive programs, to include a third party audit. The GOA pollock fishery imposes a 25,000 Chinook salmon bycatch limit, which is apportioned between the central and western regulatory areas. Additionally, a separate 7,500 Chinook salmon bycatch limit is imposed on the non-pollock fisheries in the GOA.

[10:30:40 AM](#)

MR. OLIVER said the council took action in June, 2012, to reduce the existing halibut prohibited species catch (PSC) mortality limits in the gulf, which saw the trawl and catcher vessel (CV) longline sector limits decrease by 15 percent over the course of three years, 2014-2016, and the catcher processor (CP) longline sector decrease by 7 percent in one year. The current limits are now at 266 metric tons for hook and line and 1,706 metric tons for trawl gear, apportioned seasonally, among deep-water and shallow-water species, he said.

[10:32:07 AM](#)

MR. OLIVER explained that the BSAI halibut bycatch measures were significantly addressed in June, 2015, when the council reduced the PSC limits for all the groundfish sectors, across the board, by 21 percent. The message was clear that the council has long held bycatch caps, and the effort now is to significantly reduce the bycatch levels. The industry groups have managed to implement measures to meet the new standard, he reported. Additional steps related to the Bering Sea halibut include: establishment of an over-arching framework to improve coordination between the International Pacific Halibut Commission (IPHC) with the council; exploration of abundance-based halibut PSC limits in the BSAI; annual reports from the trawl flatfish fishery on fleet requirements to achieve reduced halibut bycatch; improved methodology for assessing halibut bycatch discard mortality rates (DMRs) in the groundfish fisheries; and deck sorting of trawl caught halibut to reduce bycatch mortality. Finishing, he directed attention to the penultimate page of the handout, labeled, "PSC Bycatch Limits," to provide a summary of the bycatch cap limits broken down by species and distribution between gear types.

The committee took a brief at-ease at 10:34 a.m.

[10:35:12 AM](#)

SAM COTTEN, Commissioner, Alaska Department of Fish & Game (ADF&G), expressed appreciation for the comprehensive overview being presented and offered the following clarifications and comments: The definition of bycatch should be clearly differentiated from incidental-catch, which is legal, although subject to limitations; the terms are often incorrectly interchanged. Six of the eleven voting members on the council

represent the U.S., although the goals for balanced fisheries are a shared concern. Many areas of Alaska are dependent on the groundfish harvests, although a high percentage is taken by fishermen who identify as "other than" Alaskan resident. The proportion of Chinook salmon in the Gulf of Alaska (GOA) that originate in Alaskan watersheds is about 20 percent. The catch of fish from Southeast Alaska (SE) have generally originated in hatcheries. The bycatch Chinook salmon taken in the Bering Sea is only 5 percent of the overall harvest, but 50 percent of those are Alaska bound fish. He recalled that Chinook salmon bycatch limits were not imposed in the gulf or the Bering Sea, until a spike occurred in the early 2000's, which resulted in about 120,000 Chinook salmon being taken in one season. Data and statistics abound showing that only about 3 percent of the salmon bycatch represent fish bound for the rivers of Western Alaska, although 50 percent of the salmon bycatch are Alaska bound fish.

[10:40:00 AM](#)

TRENT HARTILL, Federal Fisheries Coordinator, said two types of fisheries occur in state waters. The first are the guideline harvest fisheries (GHL), which are regulated under the purview of ADF&G through the Alaska Board of Fisheries regulatory process, and have the following characteristics: typically no salmon or halibut bycatch limits are imposed, with the exception of Prince William Sound pollock fishery; the state does not administer a groundfish observer program to track bycatch; GHL fisheries are small in scale and effort; the state prohibits non-pelagic trawling in most state waters, which serves to alleviate the incidents of bycatch; and the state has limited longline and trawl GHL fisheries. The second type are the parallel fisheries, which have the following characteristics: regulated and operated under federal purview but occur in state waters; salmon and halibut bycatch taken in state waters accrue to the overall federal bycatch limits; all participating vessels are subject to federal observer program requirements; and the state has jurisdiction to modify the regulations, but the management structure is established by the North Pacific Fishery Management Council (NPFMC) and implemented by the National Marine Fisheries Service (NMFS). The department recently proposed an element that was adopted by the council, which allows flexibility to the state for mitigation of Chinook salmon bycatch limits.

[10:44:08 AM](#)

MR. HARTILL directed attention to the committee handout, titled, "Salmon and Halibut Bycatch in State Managed Fisheries, House Fisheries Special Committee, March 9, 2017," and the page labeled, "Guideline Harvest Level and Sablefish Quota Fisheries," to point out the Alaska map showing the fishery areas, gear types fished, and the allowed limits. The areas are designated as Southeast (SE), Prince William Sound (PWS), and Cook Inlet. In the SE, the longline effort prosecutes the demersal shelf rockfish (DSR), Pacific cod, and sablefish. The catch allowance is comparatively low to federal fisheries and trawl gear is prohibited. Although there are no bycatch limits in SE, many of the members of the fleet hold an individual fish quota (IFQ) for halibut, which serves as a mitigating factor for many of the halibut caught. Trawl gear is prohibited. In PWS, openings for longline allow the taking of sablefish, and Pacific cod, and also impose no halibut bycatch limits due to the prevalence of IFQ's. The trawl fleet is allowed to take 9.4 million pounds of pollock and a limit of 3,773 pounds of salmon bycatch has been set for the 2017 season. The Cook Inlet area hosts one longline fishery that harvests about 50,000 pounds, has no halibut bycatch limit, with nearly 100 percent of the participants holding an IFQ, and non-pelagic trawl gear is prohibited.

MR. HARTILL referred to the final page of the handout labeled, "State Managed Parallel Fisheries," to point out the Alaska map of the parallel fishery areas and indicating the gear types used and limits allowed. Parallel fisheries are conducted in four areas: Kodiak, Bering Sea Aleutian Islands (BSAI), South Alaska Peninsula, and Chignik. The Kodiak area hosts two fisheries: longline for Pacific cod, and a trawl effort for pollock using non-pelagic gear. The BSAI area also hosts two fisheries: longline for Pacific cod, and trawl for pollock, Pacific cod, and Atka mackerel. Non-pelagic trawl gear is allowed in limited state waters for specific areas of this fishery. The South Alaska Peninsula area fishery directly reflects that of the BSAI, save the presence of Atka mackerel. The Chignik area hosts a longline fishery for Pacific cod, and a trawl fishery for pollock. The non-pelagic trawl gear is prohibited in the Chignik fishery.

[10:49:14 AM](#)

COMMISSIONER COTTEN added that non-pelagic trawl fisheries typically prosecute cod, yellow fin sole, or arrowtooth flounder, using a net that comes in contact with the sea floor. The pelagic gear is used in the mid-waters for catching pollock.

The committee took a brief at-ease at 10:49 a.m.

[10:49:45 AM](#)

CHRIS WOODLEY, Executive Director, Groundfish Forum, Inc., provided an overview of the Amendment 80 Sector, paraphrasing from a prepared statement, which read as follows [original punctuation provided with some modifications, relating to the committee handout titled, "Amendment 80 Fisheries & Halibut Bycatch Management"]:

Thank you for the opportunity to discuss how our fleet creates economic activity in Alaska, and how our fleet has been addressing the issue of halibut bycatch in the Bering Sea/Aleutian Islands.

Slide 2: Groundfish Forum is a trade association representing five companies who operate 19 trawl-catcher processor vessels.

This fleet of US flagged vessels catch, process and freeze various flatfish, Atka mackerel, Pacific Ocean perch, and Pacific cod in the federally managed fisheries of the Bering Sea, Aleutian Islands and Gulf of Alaska.

For the rest of this presentation I will be referring to this fleet by its industry name: "The Amendment 80 Sector"

The A80 Sector meets the highest sustainability standards in the world and boasts sustainability labeling from the Marine Stewardship Council as well as the Alaska Seafood Marketing Institutes RFM certifications.

Slide 3: In conducting these fisheries, the A80 Sector makes over 550 port calls a year to Alaskan communities where we deliver processed catch for further transportation to international and domestic markets. In the most recently available statistics from the 2015 NOAA fisheries economic safe reports, the A80 Sector spent nearly \$60 million in Alaska in 2015. More specifically the A80 Sector:
Purchased \$38 million in fuel & \$2.2 million in provisions

Conducted \$4.5 million in maintenance and repair work in Alaskan shipyards.

Paid over \$3 million in fishery landing taxes.

These offload activities in Alaskan ports generate another round of economic activity, indirectly or inducing 2,900 maritime support sector jobs in Alaska.

These are year round family wage jobs that include longshore and stevedoring work, cold storage, warehousing, transportation, freight and shipping.

Slide 4: A80 fisheries are among the best managed in the world. All catch is weighed on computerized flow scales. Each vessel carries a minimum of 2 federal fishery observers, 100% of the time. Observers sample each haul to determine species composition of both target and bycatch species. Raw catch records, catch production records, and bycatch records are reported daily to national marine fisheries service and are separately tracked by a private data management company which allows our fleet to react and respond to real time on the grounds information.

Slide 5: It is because of this extraordinary level of management, monitoring and oversight, that we have exceptional catch and bycatch accountability. As such, we can state with full confidence and accuracy both our target catch and bycatch numbers.

So despite the fact that halibut live and co-mingle with our target catch, halibut bycatch accounts for less than one half of 1% of our total catch.

While halibut is a small fraction of our overall catch, the management of halibut bycatch is as important, if not more important, than the management of our target species.

Slide 6: So what is the state of halibut bycatch? Is it going up? Is it going down?

In an overall assessment provided by the International Pacific Halibut Commission in January of 2017, halibut bycatch was reported to be at its lowest level since the full Americanization of the federal groundfish fisheries in the late 1980's.

Halibut bycatch has been declining most significantly in the Bering Sea and Aleutian island fisheries - where the Amendment 80 fleet has played a critical part in this reduction.

Slide 7: A80 companies, captains and crew work extremely hard to reduce halibut. I'd like to draw your attention to three key components of this reduction:

Our ability to successfully manage halibut bycatch has been largely due to a cooperative fishery management structure created by the 2008 rationalization of our fishery - known as the "Amendment 80 Program" (A80)

Prior to the A80 Program, vessels within our fleet were given a common quota (or target and prohibited species catch) and each vessel would race to harvest as much fish as quickly as possible. As a result of this race, our fisheries were routinely shutdown due to our fleet exceeding our common halibut bycatch pool.

Today, catch and bycatch are allocated down to the specific vessel level. Because vessels are no longer in a race, our captains can slow down, behave cooperatively, share information and avoid halibut by moving on.

Slide 8: The second major component of our success has been the ability to modify our fishing gear.

Gear experimentation has allowed us to reduce gear contact with the bottom by 90% and to develop halibut excluders that allow halibut to swim free from our nets.

One note: when you use a halibut excluder you can also lose up to 30% of your target catch. As such it can be an effective tool, but only under the right conditions on the fishing grounds.

Slide 9: Step one was to avoid halibut from getting into the net. Step two was to modify the gear to minimize halibut that weren't avoided.

So what happens when halibut still get caught in our nets?

Halibut is a prohibited species catch, which means when it is brought aboard, we are required to discard it as soon as possible after a NMFS observers can measure and sex the fish.

Before 2015, A80 vessels were required to dump our nets directly into "live tanks" where all catch and bycatch would remain until they were removed from the tanks to begin sorting, processing or discarding. Because of the timeframe involved, halibut could be on board for hours before they were discarded - mostly dead. Under this system, NMFS estimated that 85% of halibut brought aboard our vessels was discarded as dead.

Slide 10: In 2015, the A80 Sector resurrected an experiment bycatch handling process which allows the sorting, measuring, sexing and discarding of halibut to occur from the decks of our boats (instead of from the factory). This activity occurs within the first 20 minutes of the nets being brought aboard when the halibut are still very lively.

This permitted program, known as deck sorting, requires an additional 1 - 2 fishery observers, as well as additional electronic monitoring and reporting requirements.

Since 2015 we have expanded the number of A80 vessels participating in the program as well as the fisheries we are using deck sorting in. In 2017 we anticipate further participation in deck-sorting and further use of the program in all our fisheries (weather and other factors permitting).

Slide 11: Results: We have had solid success with the deck sorting program. In pursuing this program we have found that we can, on average, deck sort 85% of the halibut that comes on board and that the mortality rate for deck-sorted fish can be reduced down to 45% (instead of 85%).

We continue to modify aspects of the program to allow for the maximum adaptation and utilization by our

fleet, but we anticipate that deck sorting won't become a regulatory measure for at least another year or two.

Closing: The A80 fleet has been extremely responsive to the NPFMC's halibut bycatch reduction measures. Most of these bycatch reduction measures were intended to ensure that additional halibut would be available for commercial harvest by halibut fishermen from coastal communities (notably St. Paul) along the Bering Sea coast.

NMFS reported in December 2016 the A80 Sector had reduced our halibut bycatch by over 35% from the most recent five-year average.

We are proud of these results and continue to work closely with Bering Sea halibut fishermen and the council to minimize our bycatch to the extent practicable. However, it is critical to understand that avoiding halibut, using halibut excluders, and deck sorting halibut each come with significant impacts to our fleet's operations and costs.

Increases in fuel consumption, increases in observer and monitoring costs, lost fishing time, reductions in factory efficiency brought about by deck sorting, and additional management costs are just a few notable examples of how reducing halibut bycatch has operational impacts to the A80 fleet.

The committee took a brief at-ease at 11:03 a.m.

[11:03:42 AM](#)

BRENT PAINE, Executive Director, United Catcher Boats Association, directed attention to the committee handout titled, "Rational Bycatch Management-Using Bycatch Reduction Agreements to Minimize Salmon Bycatch in the Bering Sea Catcher Vessel Trawl Pollock Fishery, March 9, 2017," page 2, to illustrate the location of the pollock fishery with color gradations to indicate the metric tons harvested during the 2016 "A", or winter, season of the Bering Sea pollock fishery. He said the Bering Sea catcher vessel (CV) pollock fishery is governed under the American Fisheries Act (AFA), 1998, which rationalized the pollock fishery. The fleet consists of 91 shore-based CVs, which deliver pollock to six shore based cooperatives located in

the communities of Dutch Harbor, Akutan, Beaver Inlet, Sand Point, and King Cove. The fleet also has 19 mothership-based CVs, which deliver to three at-sea processors.

[11:06:07 AM](#)

MR. PAINE said that, in the pollock fishery, salmon are a prohibited species catch (PSC), which today applies to both Chinook and chum salmon. Between 1995 and 2010, Chinook bycatch regulations were based on a trigger closure that caused the fleet to reposition. However, beginning in 2011, a hard cap was allocated between the sectors, as adopted by the North Pacific Fishery Management Council (NPFMC) and implemented by National Marine Fisheries Service (NMFS); Amendment 91. The chum salmon were managed under a combination of time and area closures and triggered closures. Beginning in 2017, the council adopted Amendment 110, and the chum Chinook salmon bycatch are now managed together.

[11:07:13 AM](#)

MR. PAINE explained that the rationalized fishery structure is key for the pollock fishery to operate cooperatively for salmon bycatch reduction. Each cooperative has an inter-cooperative agreement (ICA), which is a written agreement, across all sectors, governing the pollock fishery participants. Within each ICA, rolling hot spot (RHS) agreements exist. The RHS agreements were first effected in the early 2000's. He directed attention to the handout page 7, labeled, "Rolling Hot Spot Closures, High bycatch areas identified by Sea State," with a sector map showing gradation color markers to indicate how RHS areas are tracked. Every week a data company, Sea State, provides the fleet with comprehensive updates. Areas showing high rates of bycatch are closed, as per the ICA. Vessels that have demonstrated low rates of bycatch may continue to fish, having proven that they are able to minimize bycatch. He said another tool that is used are fixed area closures. Certain areas can be predicted to have high rates of bycatch, and the fixed area closure is imposed, proactively, based on the multiple years of bycatch data. He directed attention to the handout, page 9, labeled, "Chinook Conservation Area - Fixed Closure ICA," and the map illustrating a fixed closure sector.

[11:09:31 AM](#)

MR. PAINE said another key to bycatch reduction is the 100 percent at-sea observer and shore-side, offloading monitoring

requirement. The high level of coverage means the salmon counts provided to the data base are actual census numbers versus estimates. The CV and catcher processor owners pay a monthly fee to contract the observer coverage. Further, the CVs are required to release electronic data to Sea State for compilation, which includes the catch data gathered by the NMFS observer and the ADF&G fish tickets. Also provided to Sea State is the data from the vessel monitoring system (VMS), which is required by participants and provides a constant location link to know where a boat is fishing.

11:10:25 AM

MR. PAINE explained the effect of Amendment 91, which incentivizes the cooperatives to avoid Chinook salmon bycatch by utilizing the approach of offering a carrot versus using a stick. Thus, the hard cap was established and the concept of offering IPAs was implemented. The hard cap percentage share is 60,000 Chinook salmon, and the incentives are geared to keep the number under 47,591. The incentives to minimize Chinook salmon catch and penalties for catching, are realized at the individual vessel level. He pointed out that the crucial point has been to incentivize vessels to avoid Chinook salmon bycatch at all levels of abundance in all years. Under a straight hard cap approach, the vessels will fish to the allowed limit, but the IPAs promote the practice of avoidance altogether, which results in minimal take of all non-target species. The incentives must influence fishing decisions at levels below the hard cap, he stressed, in order to hold bycatch to a performance standard of 47,591.

11:12:36 AM

MR. PAINE described the Salmon Savings Incentive Plan (SSIP) inshore sector, which the fleet submits annually to the NPFMC, as a plan for managing its Chinook salmon allotment. Each vessel receives a base cap allocation (BCA) representing its share of the 47,591 performance standard to be met. A vessel's BCA is made pro rata to its pollock allocation. Thus individual vessels may receive a catch allowance as high as 2,000 while others have a limit of 70. The BCA is the target that the vessel will strive to stay below. The primary incentive is that a vessel receives a salmon savings credit (SSC) for use in future years for annual bycatch levels that fall below its BCA. He explained that the SSCs serve to bridge the gap between the performance standard and the hard cap at the individual vessel level. The SSCs are the primary incentive of the program, and

are earned at the rate of one credit for every three salmon avoided below a vessel's BCA. Although the credits are for use in future years, they can only be banked for three years, after which they expire.

[11:15:36 AM](#)

MR. PAINE summarized that the SSIP guarantees that no more than 21,750 Chinook salmon will be caught in any year. To administer the SSIP, a secure web-accessible database is required in order for up-to-date information to be available to all of the co-op participants. He directed attention to committee handout, page 29, labeled, "Salmon Excluder," and the illustration of the required device in use on all vessels. Continuing to page 30, labeled, "Results of the Pollock CV Efforts to Minimize Chinook Salmon Bycatch, From NMFS Dec. 2016," containing a bar graph and inset summary, he pointed out that the AFA Inshore cooperative had a total 2016 Chinook salmon catch limit of 33,390, but took only 30 percent of that number, or 10,026. The total bycatch for all entities was 37 percent lower than the overall allocation: 60,000 allowed, 21,920 taken. He said this is an indication of how well the program is working. Finally, turning to page 31, labeled, "BSAI Trawl Chinook Salmon Incidental Catch," he reviewed the history of the bycatch numbers from 2005-2016, to stress the recent trend of lower bycatch rates.

The committee took a brief at-ease at 11:17 a.m.

[11:17:53 AM](#)

STEPHANIE MADSEN, Executive Director, At-Sea Processors Association (APA), said APA is a fleet of large, catcher processor (CP) vessels that catch fish and process the catch on-board. The fleet operates exclusively in federal fisheries and is not involved in the parallel fisheries that occur in Alaskan waters. The Pollock Conservation Cooperative structure allows rational management of the target species as well as the bycatch. The fleet is partnered and owned by several of the community development quota (CDQ) groups, including: Norton Sound, Coastal Villages, and the Central Bering Sea Fisherman's Association.

[11:20:02 AM](#)

MS. MADSEN explained that pollock, a cousin to cod, provides a flaky, white, mild flavored meat. The Alaska pollock is the largest fishery in the U.S., and the largest certified

sustainable fishery in the world. The fishery is certified by the Alaska Seafood Marketing Institute (ASMI) program and the Marine Stewardship Council (MSC). She said the vessels operate under the federal requirement for two, onboard observers, as well as with flow scales, and on-board cameras. The fleet was formed under the American Fisheries Act (AFA), 1998, which directed the formation and structure of the cooperatives. The AFA maintains an informational database for compiling reports on the fisheries, which are available to any interested party. The information provides a high level of transparency for the fleets operational practices and accountability.

[11:21:40 AM](#)

MS. MADSEN said the bycatch rulings that govern the fleet are Amendment 91, implemented in 2011, and Amendment 110, implemented in 2017. The regulatory section closures were recognized as not being particularly effective in avoiding bycatch species, thus the North Pacific Fishery Management Council (NPFMC) invoked a program that provided the industry with particular objectives; however, it was left in the hands of the association to design an effective approach, and adopt management practices for the fleet, to attain the goals. The fleet strives to be good performers and remain in operation throughout the season. Hard caps do exist, she said, providing a low abundance limit, performance standard limit, and an absolute limit. However, these act as backdrops that aren't expected to be reached, especially the absolute limit of 17,040, which, if attained, would shut down the fishery. The performance standard limit, 13,516, is used for managerial purposes, but if it is reached for three out of seven years, it will become the hard cap. The possibility provides a primary incentive for the fleet to avoid bycatch and remain below the performance standard limit. The 2017 season has been identified by ADF&G as a low abundance year, and the fleet will be correspondingly managed under the limit of 9,462.

[11:24:00 AM](#)

MS. MADSEN explained the incentive plan agreement (IPA) that the CP association adopted, as a means to provide the incentives necessary to achieve the goals and objectives of Amendments 91 and 110. The IPA fleet contract was submitted to, and approved by, National Marine Fisheries Service (NMFS). The IPA was initially adopted in 2011, but has undergone some modifications to comply with Amendment 110, which requires all vessels to utilize salmon excluder devices at designated times of salmon

abundance. She reviewed the primary components of the IPA plan, which include: data gathering, monitoring, reporting, information sharing; identification of bycatch avoidance areas; fishing area prohibitions for vessels with poor bycatch performance; A-season closed area and conditional B-season closed areas; vessel outlier penalties; and gear research on salmon excluders. The other important component is accountability, she stressed. Every year APA must demonstrate to the NPFMC that the mechanisms in the IPA are working. A key aspect of the fleet's communication system is the 10 Chinook salmon alert. This alert is received by herself and every member of the fleet, whenever 10 Chinook salmon are caught by a single vessel. The other vessels can easily determine the locale of the alert, and avoid the "hot spot" area. Although technology has been devised and implemented to avoid Chinook salmon entering the nets, it is not yet possible to determine whether any have been caught until the net is brought on board the vessel and the fish are out of the water, she said.

[11:27:23 AM](#)

MS. MADSEN directed attention to the committee handout, titled, "House Special Committee on Fisheries, Innovative approach to reducing bycatch, March 9, 2017," page 10, labeled "2015 CP IPA results - A-season Bycatch Avoidance Areas," and the map illustrating the identified bycatch avoidance areas (BAAs) and the restrictions observed by the CP sector. In weeks of high bycatch reports, vessels with poor avoidance performance records were subject to exclusion to these areas. Some weeks of the season saw up to seven vessels being denied fishing privileges. She used the subsequent page, labeled, "A-season Chinook Conservation Area; B-season Chinook Conservation Areas," to locate and describe two areas identified for closure: 1) An area of 735 square mile is closed to all pollock fishing, 100 percent of the time, during the A-season. The sector is a known Chinook salmon abundance area. 2) An area of 1,295 square miles is closed to CP pollock fishing in the second half of October depending on the bycatch rate reported for September. If the September Chinook salmon bycatch exceeds 1.5 fish per 100 tons of pollock, the suspension is invoked.

[11:28:34 AM](#)

MS. MADSEN explained the outlier program APA designed to identify a vessel that operates outside the normal range of the others. Reminding the committee that the fleet fishes two seasons per year, she said, if a vessel is identified as an

outlier during three seasons, the penalties imposed are exclusion from known avoidance areas, and exclusion from any conditional, in-season closures. However, she reported, the APA has not identified any boat in the fleet with standard deviations over three seasons to require the measure be invoked. Vessels have successfully changed bycatch behavior when initial indications of deviation have been called to their attention.

[11:29:33 AM](#)

MS. MADSEN explained that new gear technologies for avoiding bycatch are continually being sought. Fish behavior is factored into the prototypes, such as Chinook salmon being stronger swimmers than pollock, and that salmon are light sensitive. However, it is understood that fishing for pollock in the same area where salmon are abundant will never be a possibility. The fleet is also cooperating with the genetic, stock composition analysis being conducted by the governing agencies, and every tenth Chinook salmon brought on board is sampled to provide the required data. She directed attention to the committee handout page, labeled, "Genetic Stock Composition Analysis of the Chinook Salmon Bycatch from 2015 BS Pollock Trawl Fishery; BSAI Chinook Bycatch by Year," the graph illustrating the data analysis, and pointed out the origins of the bycatch salmon stocks.

[11:31:16 AM](#)

MS. MADSEN said the vessels participate in the food bank program and any edible bycatch salmon is donated to Sea Share for distribution to schools and community support centers, such as Bean's Café in Anchorage, and the Glory Hole in Juneau. Ms. Madsen summarized the three measures being taken by the fleet to avoid bycatch: fleet bycatch caps allocated to individual vessels; observation of rolling hot spot avoidance areas; and seasonal closures. The challenge is for APA to demonstrate that the measures being implemented are adequate. Notable success points proving the industry is operating with good faith efforts include the practice of vessels relocating to avoid high risk areas, the data statistics that indicate a trend of lower Chinook salmon bycatch, and the development/implementation of technological innovations such as the salmon excluders. Finally, she acknowledged that the presentation did not address halibut bycatch as the pollock fleet is a pelagic trawl fishery and seldom encounters halibut, although guidelines do exist.

The committee took an at-ease from 11:33 a.m. to 11:35 a.m.

11:35:51 AM

JULIE BONNEY, Vice-President, Alaska Groundfish Data Bank, Kodiak Chamber of Commerce, described the Kodiak, Gulf of Alaska (GOA) sustainable trawl fisheries fleet characteristics as follows: comprised of 38-40 vessels, mostly in the 80 foot range with many being family-owned and employing a locally based crew; many have the experience of working in a cooperative fleet, from a history of work with groups such as the Bering Sea pollock fleet; and the catch is delivered to six shore-side processors, which comprises about 60 percent of the total Kodiak port landings. The trawl fisheries are sustainably managed for species of pollock, cod, rockfish, and flatfish, which are under federal purview and regulated through the North Pacific Fishery Management Council (NPFMC). The pollock, cod, and flatfish catch are certified by the Marine Stewardship Council (MSC) and Alaska Responsible Fisheries Management (RFM) programs. The fish are taken in high volume of species that represent a low economic value. The harvest activity provides a fishery that operates nearly year-round. The fishery exerts a significant economic impact on Kodiak, as reported in a McDowell Group analysis, compiled for the Kodiak Island Borough and City of Kodiak, in May 2016. She reviewed the report highlights, which indicated the following: the port of Kodiak is ranked as number three in the nation by value and number two by volume; the groundfish harvesting and processing accounts for almost 20 percent of all employment in Kodiak; groundfish fishing and processing accounts for most jobs, more income, and more impact on the Kodiak economy than any other fishery providing 2,000 jobs, \$111 million in labor income, and \$187 million in total seafood output for the Kodiak economy; year-round fisheries create year-round resident jobs with about 50 percent of processing workers, 1,390, claiming Kodiak residency, and Kodiak's year-round fisheries and shore-based processors lead the state in employing the highest percentage of local residents.

11:39:04 AM

MS. BONNEY said the ability to manage bycatch and achieve total allowable catch depends directly on the fishery management system, and she reviewed the approaches taken in the gulf versus the Bering Sea. The gulf trawl management encourages fishing vessels to race against each other for access to the target fish of pollock or cod, while subject to constraining fleet-wide bycatch caps on halibut and Chinook salmon. There are no

individual vessel accountability requirements for bycatch, nor any incentives to slow the fishery and encourage working together as a fleet. In the Bering Sea trawl management sector, both target species allowances and bycatch caps are allocated to co-ops so no individual vessel is racing for catch. The co-ops have formal agreements and penalties to control behavior and include incentives for all participants to collaborate as a fleet to minimize bycatch. The GOA trawl industry operates under bycatch restrictions for Chinook salmon and halibut, but without formal cooperative management. If the limits are reached, the fisheries are closed to all participants and can remain closed for the season or the entire year. The recent bycatch regulations affecting the GOA trawlers include a Chinook salmon bycatch limit for the pollock fisheries, implemented 2012; Chinook salmon bycatch limit for the non-pollock fisheries, implemented 2015; and reduction of the halibut bycatch limit by 15 percent implemented over a three-year period, 2014-2016.

[11:41:31 AM](#)

MS. BONNEY explained the efforts taken by the Kodiak trawlers to address the bycatch issue. The group advocated for the Central Gulf Rockfish Co-op management program, effective 2007 with a sunset in 2021, which was designed within the NPFMC process to meet multiple objectives for minimizing bycatch, fishery stability, and increased community benefits. Advocacy efforts were extended for a similar program, at the council, with bycatch objectives for the trawl cod, pollock, and flatfish fisheries. The initiative was begun in 2012 but died in 2016.

[11:42:07 AM](#)

MS. BONNEY directed attention to the committee handout, titled, "Kodiak Trawlers - Bycatch Minimization Efforts," the page labeled, "Rockfish Program Results," and reviewed the line graph tracking the halibut catch since 1996. She noted that a six fold decrease has occurred under the cooperative program. Additional efforts have included the design of a halibut excluder device for the cod trawl fishery. It uses fish morphology to separate the catch, allowing flatfish and halibut to escape through narrow, side slots, while retaining the cylindrical shaped fish. The test fishery on the device indicated a 57 percent reduction in halibut bycatch and it's now widely used in the GOA and Bering Sea trawl cod fisheries. A salmon excluder for the pollock fishery was tested on two boats, over four seasons, 2013-2014, resulting in a salmon escapement

of 33-54 percent. To continue the effort for addressing the issue, the fleet purchased two video systems to monitor the excluder devices. The systems are loaned to fishermen to allow them to observe how the excluders are working on their vessel gear. The skippers are also trying out an LED light attraction approach for salmon.

[11:44:35 AM](#)

MS. BONNEY reported that another effort being promoted is voluntary hot spot reporting and signal alerts for the pollock fisheries. The program replicates what is already in regulation in the Bering Sea. There is an ad hoc process to allocate both pollock and Chinook salmon to participating vessels to stop the race for fish. The allocations are aggregated at the processor level to create the co-ops. The voluntary agreements include bycatch reporting requirements and individual vessel performance standards. Implementation requires that multiple fleet meetings be held, which can be extremely contentious as well as time consuming. She said the allocation agreement requires a 100 percent consensus by the fishery participants, and that may be a difficult achievement, as a vessel captain may decide it's in his best interest to race for higher catches even though the fishery may be closed early due to the bycatch cap. These agreements are tenuous and uncertain as a long-term fishery management structure and do not cover all the groundfish fisheries.

[11:45:56 AM](#)

MS. BONNEY described the consequences of fishery closures due to bycatch. Referring to examples that occurred in 2015, she explained that the cod and flatfish fisheries closed on May 3 for the remainder of the year due to newly imposed salmon caps for the non-pollock fisheries. However, an emergency rule promulgated through the council, allowed the fisheries to be reopened on August 10. The potential foregone revenue from the lost harvest was about \$4.6 million in ex-vessel value and \$11.3 million in first wholesale value. She said the 2016 arrowtooth flounder fisheries were closed for 120 days due to the attainment of halibut bycatch limits. The arrowtooth flounder has good potential in the marketplace but the ability for the industry to provide a steady product supply is too unpredictable to get it off the ground.

[11:47:11 AM](#)

MS. BONNEY reported on the 2017 bycatch caps to date: In the Central Gulf of Alaska (CGOA) pollock fishery - 47 percent of limit has been taken while only 32 percent of the CGOA pollock quota has been caught. Three pollock seasons remain to be harvested. When the cap is hit, the fishery is closed for the year. In the Gulf of Alaska cod/flatfish fishery - 55 percent of the limit has been taken, all by the Western Gulf cod fishery, leaving 45 percent, which may not be enough to support the Central Gulf trawl fishery's needs for the Pacific cod fishery and year-round flatfish fisheries. She stressed that early closures mean the trawl fisheries do not reach their total allowable catches resulting in impacts to harvesters, processors, coastal communities, and the State of Alaska in terms of foregone tax revenue.

[11:48:28 AM](#)

MS. BONNEY stated that the limited access system "race for fish" fails to reward conscientious fishermen and favors fishermen who catch the greatest amount of fish in the shortest amount of time, regardless of bycatch performance. Frustration exists within the fleet dependent on the GOA trawl fisheries, all of whom have experienced the benefits of cooperative management in the Bering Sea trawl fisheries and the Central Gulf Rockfish Program. The fleet has termed it "co-op envy." The participants continue to do the best they can based on the cards they have been dealt, she finished, and said, "At this point we believe it is a solvable problem."

The committee took a brief at-ease at 11:49 a.m.

[11:49:56 AM](#)

LINDA BEHNKEN, Executive Director, Alaska Longline Fishermen's Association (ALFA), reviewed the origination of ALFA, stating that it was founded in 1978 to end foreign overfishing and promote Alaskan fisheries. The membership extends to fishermen who longline for halibut and sablefish, as well as troll, seine, and gillnet for salmon, and extends to those pursuing crab and shrimp. The association is involved in fisheries management at the state, federal and international levels. The ALFA mission is to promote sustainable fisheries and thriving fishing communities through policy advocacy, collaborative research, and the young fishermen's initiative.

[11:51:11 AM](#)

MS. BEHNKEN focusing on collaborative research, she said ALFA's fishery conservation network was formed to empower stewardship innovation through continuous research and collaboration. The fishery conservation measures combine the problem-solving genius of fishermen with the rigors of science, which includes: innovative solutions that improve resource and fishery viability; sharing data, mentoring young fishermen; and increasing the viability of small-boat fishermen to keep them competitive. A number of fishery conservation projects are ongoing, which include: rockfish reporting, bathymetric mapping, electronic monitoring, fleet fuel efficiency, and the Southeast Alaska sperm whale avoidance project to reduce marine mammal depredation on longline gear.

[11:52:41 AM](#)

MS. BEHNKEN said that salmon and halibut are target species for the fleet, but the management of rockfish bycatch poses a concern; although it's an allowable catch with specific caps. Thus, in 2009 the Alaska Board of Fisheries (BOF) challenged commercial and charter fishermen to voluntarily unite in an effort to avoid rockfish bycatch. Rockfish are a long-lived species, up to 120 years, and are slow to recover when overfished. Overfishing has triggered fishery closures on the west coast of British Columbia (BC). The ALFA fleet proactively took steps to ensure the health of the rockfish stock by adopting voluntary measures. The association asked the fishermen to provide rockfish bycatch information via fish ticket/log book reports, and the data has provided useful maps of where the hot spots exist in the fishery. The analysis of the information allowed the fishermen to avoid hot spots and minimize the bycatch. She provided illustrations of the maps used by the fleet captains, which are detailed with specific information for catch avoidance. [The color coded maps are available in the committee handout, titled "Alaska Longline FISHERMEN'S ASSOCIATION," pages 9-16, and include the bathymetric charts.] The maps are based on the seafloor structure, taking into consideration temperature changes, and other variables. The log book data and bathymetric mapping provides fishermen with tools to visualize benthic structure, control rockfish bycatch, and improve fishing efficiency. The vessels must purchase the appropriate software to take advantage of the contour mapping for effective fishing. Finishing, she said that in three years, members have reduced rockfish bycatch by 20 percent in the halibut fishery and 6 percent in the sablefish fishery. The current focus is to maintain rockfish bycatch at or below the

permitted levels and at this time, with the available mapping tools, the rockfish stocks are considered to be healthy.

12:00:40 PM

CHAIR STUTES thanked the presenters and solicited written questions from committee members for distribution to, and responses from, the participants.

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Fisheries meeting was adjourned at 12:00 a.m.