INTERNATIONAL PACIFIC HALIBUT COMMISSION

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Ms. Linda Behnken
Alaska Longline Fishermen's Association
P.O. Box 1229
Sitka, AK 99835

Dear Linda,

Thanks for your query about the preliminary data from the NMFS Observer Program. We received a similar query from Brian Lynch at the Petersburg Vessel Owners Association and I am copying this response to him.

The letter sent to the North Pacific Fishery Management Council from NMFS on September 27th, just prior to the October Council meeting, generated quite a bit of commentary and queries to our office about the estimate of halibut discards by the Hook and Line fleet contained in the letter. The estimate of total discards of halibut by this fleet (e.g., Gulf of Alaska 9,205 mt) was presented in a different context than that in which the Commission and the Council normally deal with halibut discard mortality in a regulatory sense. It is also a different context than that in which the Commission normally reports its own estimates of regulatory and wastage discard mortality by the commercial halibut fleet. The key difference in both cases is the normal reporting of halibut mortality, rather than total discards. Because this issue has generated so much commentary, we would like to provide some background and interpretation of it. However, we would like to comment at the outset that observation of catch and discards within the halibut fishery is a welcome development and we look forward to receiving and reviewing estimates from this program when it is fully implemented.

The Alaska Region's report contains a set of tables summarizing observer coverage and estimates of discards derived from 2013 fishery monitoring (relevant tables at the end of this letter). The report is a high-level view of the results. As such, it lacks detail which one would typically look for to understand what is behind these data. Many questions arose when this became public and some serious problems were identified. The main issues were the following:

1. The AK halibut IFQ fishery is not reported separately but is within the "Hook and Line" totals shown in tables A-2 and A-3. The IFQ fishery is probably a very large proportion of these totals but there is nothing provided in the report that allows the reader to uniquely identify it. Other hook and line fisheries included in this strata would be those for sablefish, rockfish, and Pacific cod.
2. A methodological error exists in how discards were calculated for the halibut IFQ fishery shown in Table A-3. In short, the error involves the average weight used to estimate halibut discards in the halibut IFQ fishery. NMFS used an average derived from ALL sizes of

halibut caught, i.e., retained and discarded. Note that almost all halibut IFQ fishery discards will be composed of U32 halibut, due to the minimum size limit of 32 inches. As such, those discards would have an average weight of less than 10 pounds, probably in the 8-9 pound range. Unfortunately, an overall average weight for all sizes of halibut caught was used, which was probably roughly 20-25 pounds or higher. Given the information provided, teasing out the impact of this error is problematic.

3. The estimates shown represent catch, and NOT mortality. IPHC assumes, based on tagging studies, a discard mortality rate of 0.16 to estimate mortality in the halibut IFQ fishery. The same issue applies for estimates of discards in other non-target fisheries, i.e., the trawl fisheries, which have fishery-specific discard mortality rates (see p. 353 in our 2012 RARA for the DMRs). Halibut bycatch is managed using limits ("caps") on mortality, and none of the data provided have any mortality rates applied. Consequently, actual mortality is substantially lower than the figures shown.
4. As is the norm in most US federal fisheries data presentations, the information is presented in metric tons, round weight. However most halibut stakeholders are accustomed to halibut data in pounds, net weight, as that is the metric for IPHC catch limits, biomass, bycatch reporting, etc. The conversion is Net Weight = Round Weight x 0.75.

The coverage levels giving rise to these estimates are variable, with some coverage levels being well below target levels. Most of the vessels in the vessel selection pool are likely to be halibut IFQ vessels, while those in the trip selection pool are the larger vessels. While trip selection coverage is within specifications, vessel selection coverage in the Gulf of Alaska and Bering Sea/Aleutian Islands is well below target.

Taking some of these issues into account and expressing the discards from the Hook and Line fleet in terms relevant to halibut management yields the following:

Observer Program estimate of halibut discards: 9,205 mt (round weight)

Estimate corrected for round weight to net weight: 6,904 mt (net weight)

Estimate converted to million pounds, net weight: 15.221 Mlb (net weight)

Estimate converted to halibut mortality (million pounds net weight): 2.435 Mlb (mortality, net weight)

However, these conversions still do not deal with the effect of using an incorrect average weight for the weight of halibut discarded to comply with IPHC minimum size regulations. Estimating that effect is not possible using only the information provided in the letter to the Council but the large difference in average weight between retained and discarded halibut in the hook and line fishery implies a substantial reduction in the estimated halibut mortality of 2.435 Mlb implied in the NMFS letter to the Council.

The Commission has a process for calculating an estimate of halibut mortality from commercial discards and has been incorporating these estimates into total removals and the annual halibut stock assessment since the 1990s. For comparison, the estimated average discard mortality from the commercial halibut fishery over the 2008-2012 period for IPHC Regulatory Areas 2C-3B (Gulf of Alaska) was 1.874 Mlb. At this point it is not possible to generate a direct comparison

with the NMFS estimate due to the issues noted above. However it is reasonable to assume that adjustments to the NMFS estimate to account for these issues are likely to result in an estimate of halibut discard mortality that is not grossly different, and could be lower, than that currently being used by the Commission to account for such mortality.

We hope this may provide some additional perspective on the preliminary estimates presented in the letter to the Council.

Sincerely,

Bruce M. Leaman, Ph.D.
Executive Director

cc: IPHC Commissioners
Eric Olson, Chair NPFMC
Brian Lynch, PVOA

Table A-2: **Retained** groundfish and halibut (in metric tons) in the **Gulf of Alaska** from January 1 through August 30, 2013 by gear type, operation type, and the amount of retained catch on observed versus all trips.

	Species Caught	Hook and Line		Non-Pelagic Trawl		Pot		Pelagic Trawl	
		Observed	Total	Observed	Total	Observed	Total	Observed	Total
Catcher Processor	Deep Water Flats	24	25	3,906	3,906	--	--	--	--
	Halibut	--	--	--	--	--	--	--	--
	Other	<1	<1	816	816	--	--	--	--
	Pacific Cod	2,662	2,662	797	797	--	--	--	--
	Pollock	4	4	770	770	--	--	--	--
	Rockfish	66	78	11,026	11,026	--	--	--	--
	Sablefish	536	629	339	339	--	--	--	--
	Shallow Water Flats	--	--	738	738	--	--	--	--
	Sharks	--	--	--	--	--	--	--	--
	Skates	26	26	170	170	--	--	--	--
Catcher Vessel	Deep Water Flats	<1	1	2,326	10,944	--	<1	26	216
	Halibut	540	8,463	--	--	--	--	--	--
	Other	<1	2	8	35	2	83	19	123
	Pacific Cod	777	6,111	1,557	14,349	207	10,394	83	473
	Pollock	11	57	638	5,753	<1	9	8,689	53,620
	Rockfish	67	848	5,041	5,334	0	<1	1,173	1,280
	Sablefish	918	8,107	222	238	--	--	--	1
	Shallow Water Flats	<1	<1	335	2,152	0	<1	<1	7
	Sharks	0	2	2	2	--	--	<1	3
	Skates	43	473	239	1,461	0	<1	1	16

"—" indicates no catch occurred.

- Halibut discard estimates do not include a mortality rate.
- Trip definitions follow those described in Table A-1. See Table A-7 for species grouping definitions.

Table A-3: **Discarded** groundfish and halibut (in metric tons) in the **Gulf of Alaska** from January 1 through August 30, 2013 by gear type, operation type, and the amount of discard estimated on observed trips versus all trips.

	Species Caught	Hook and Line		Non-Pelagic Trawl		Pot		Pelagic Trawl	
		Observed	Total	Observed	Total	Observed	Total	Observed	Total
Catcher Processor	Deep Water Flats	56	58	2,538	2,538	--	--	--	--
	Halibut	269	269	390	390	--	--	--	--
	Other	67	67	570	570	--	--	--	--
	Pacific Cod	89	89	274	274	--	--	--	--
	Pollock	4	4	600	600	--	--	--	--
	Rockfish	138	139	1,260	1,260	--	--	--	--
	Sablefish	11	11	37	37	--	--	--	--
	Shallow Water Flats	4	4	24	24	--	--	--	--
	Sharks	2	2	8	8	--	--	--	--
	Skates	191	197	104	104	--	--	--	--
Catcher Vessel	Deep Water Flats	40	458	155	1,343	<1	<1	<1	7
	Halibut	601	9,205	123	794	1	69	3	20
	Other	56	753	30	215	3	145	2	7
	Pacific Cod	108	1,353	119	650	<1	70	0	<1
	Pollock	3	19	137	504	<1	7	17	93
	Rockfish	80	755	39	130	<1	4	3	6
	Sablefish	40	427	0	0	--	--	--	--
	Shallow Water Flats	2	14	15	167	<1	1	0	<1
	Sharks	37	648	86	116	0	<1	2	15
	Skates	164	2,124	38	153	--	--	<1	<1

"—" indicates no catch occurred.

- Halibut discard estimates do not include a mortality rate.
- Trip definitions follow those described in Table A-1. See Table A-7 for species grouping definitions.

Table B-1. Gulf of Alaska: Preliminary data on total number of trips and vessels and number that were observed by gear type in each observer coverage category from January 1 through August 30, 2013. (Source: NMFS/AKR letter to NPFMC, September 27, 2013)

2013 Gulf of Alaska																
		Hook and Line			Pelagic Trawl			Non-Pelagic Trawl			Pot			Jig		
		Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed
CP/M	**# Trips**	30	30	100%				26	26	100%						
	# Vessels	8	8	100%				14	14	100%						
CV Full	**# Trips**				15	15	100%	108	108	100%						
Coverage	**# Vessels**				6	6	100%	24	24	100%						
Trip	**# Trips**	142	1031	14%	91	496	18%	71	426	17%	45	428	11%			
Selection	**# Vessels**	72	166	43%	41	84	49%	33	77	43%	26	100	26%			
Vessel	**# Trips**	90	1651	5%							11	223	5%			
Selection	**# Vessels**	25	339	7%							1	30	3%			
Zero	**# Trips**	0	1037	0%							0	25	0%	0	608	0%
Coverage	**# Vessels**	0	286	0%							0	2	0%	0	160	0%

Data Source: NMFS Catch Accounting System, observer data, and eLandings landing reports.

Table B-2. Bering Sea/Aleutian Islands: Preliminary data on total number of trips and vessels and number that were observed by gear type in each observer coverage category from January 1 through August 30, 2013. (Source: NMFS/AKR letter to NPFMC, September 27, 2013)

2013 Bering Sea/Aleutians																
		Hook and Line			Pelagic Trawl			Non-Pelagic Trawl			Pot			Jig		
		Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed	Observed	Total	% Observed
CP/M	**# trips**	57	57	100%	44	44		96	96	100%	7	7				
	# Vessels	36	36	100%	18	18		41	41	100%	3	3				
CV Full	**# trips**				1743	1743	100%	357	359	99%						
Coverage	**# Vessels**				79	79	100%	36	36	100%						
Trip	**# trips**	25	154	16%				19	151	13%	29	369	8%			
Selection	**# Vessels**	12	59	20%				11	19	58%	14	59	24%			
Vessel	**# trips**	3	127	2%							4	15	27%			
Selection	**# Vessels**	2	22	9%							1	3	33%			
Zero	**# trips**	0	605	0%										0	415	0%
Coverage	**# Vessels**	0	59	0%										0	110	0%

Data Source: NMFS Catch Accounting System, observer data, and eLandings landing reports.