

May 31, 2017

Mr. Herb Pollard, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

Mr. Barry Thom, Regional Administrator
National Marine Fisheries Service
1201 Northeast Lloyd Boulevard, Suite 1100
Portland, OR 97232

RE: Agenda Item H.1. NMFS HMS Report: **Drift Gillnet Hard Caps, Monitoring and Performance Objectives**

Dear Chair Pollard, Regional Administrator Thom and Council members:

In September 2015, the Pacific Fishery Management Council (Council) recommended adopting rolling two-year hard caps on the number of certain whale, dolphin and sea turtle species incidentally killed or injured by the California drift gillnet swordfish fishery. The Council also recommended that the National Marine Fisheries Service (NMFS) maintain a minimum 30 percent observer coverage level and/or require electronic monitoring, remove the unobservable vessel exemption, and establish 100 percent monitoring by 2018. At the same time, the Council adopted annual performance objectives for the California drift gillnet fishery effective as of the 2016-17 fishing season. These actions were taken to minimize bycatch and reduce impacts on non-target species.

At this point: 1) the agency has yet to implement the final rule for the Council's recommended hard caps, 2) for the May 1, 2016 to January 31, 2017 fishing season the minimum target observer coverage level was not achieved, and 3) observers documented six Northern right whale dolphins (*Lissodelphis borealis*) killed in the drift gillnet fishery, which exceeds the Council adopted performance objective for this species when extrapolated to the total number of sets. The fishery did not appear to exceed other performance objectives (table 1) and no hard cap species were observed taken in the 2016-17 fishing season.

The Council's performance objectives were established to keep bycatch levels from increasing above recent historic levels. The metrics for non-ESA listed marine mammals were based on the maximum total estimated serious injury or mortality in any one season over 10 fishing seasons, 2004-2014. Based on the Council's identified annual

performance objective methodology – extrapolating observer data for the fishing year to total fishing effort— there were a total estimated 27 Northern right whale dolphins killed during the 2016-17 fishing year, exceeding the annual performance objective of 11 northern right whale dolphins. While the performance objectives are not in regulation, the Council stated if they were exceeded, it would determine whether additional management measures are needed to further minimize bycatch.



Figures 1 and 2. Photos of Northern right whale dolphins killed in the California drift gillnet swordfish fishery (NMFS, 2002, 2003). Photographs from the 2016-17 fishing season are not available from the NMFS observer program.

Using the recently developed regression tree analysis,¹ NMFS may deviate from the performance objective methodology and report that it estimates fewer Northern right whale dolphins were killed in the 2016-17 fishing season. As of the date of this letter, that updated analysis is not available, and it would not be persuasive evidence that the fishery complied with the performance objective. Since the Council's performance metrics were based the extrapolation of observer data, it would be inappropriate to use the regression tree analysis to evaluate the fishery's performance. Doing so would be akin to comparing apples and oranges, as extrapolated total estimated catch will vary from estimates based on regression tree analysis. If the Council wishes to use the regression tree analysis in the future for the purpose of evaluating annual fishery performance against bycatch objectives, it should first recalculate its performance objectives using that new approach. Importantly, neither the extrapolated or regression tree methods will be necessary when NMFS implements the Council requested 100% monitoring and removes the unobservable vessel exemption.

The fact that the fishery exceeded the Council's performance objectives set for Northern right whale dolphins again demonstrates the fundamentally unselective nature of drift gillnets and the consequent inability of this fishery to reduce bycatch of protected species

¹ Carretta, J.V., J.E. Moore, and K.A. Forney. 2017. Regression tree and ratio estimates of marine mammal, sea turtle, and seabird bycatch in the California drift gillnet fishery: 1990-2015. NOAA Technical Memorandum, NOAA-TM-NMFS-SWFSC-568. 83 p.

as the Council intended. This further underscores the need to transition away from drift gillnets and for NMFS to fully implement the Council's final preferred hard cap and monitoring alternatives.

Table 1. Council-adopted performance objectives for non-ESA listed marine mammals and finfish² taken in the drift gillnet fishery compared to the recent year (2016-17) total estimated catch using the Council adopted methodology. In the 2016-17 fishing season, 160 drift gillnet sets were observed out of 714 sets (22.4%).³

<i>Marine Mammal Species</i>	<i>Annual performance metrics based on estimated total mortality/serious injury extrapolated from observer data</i>	<i>2016-17 Estimated Total Mortality/ Serious Injury</i>
Minke whale	5	0
Short beaked common dolphin	66	45
Long beaked common dolphin	24	4
Risso's dolphin	7	0
California sea lion	97	4
Northern elephant seal	6	0
Northern right whale dolphin	11	27
Gray whale	5	0
Pacific white-sided dolphin	22	0
<i>Finfish Species</i>	<i>Annual performance objectives based on average annual total estimated encounters</i>	<i>2016-17 Estimated Total Catch</i>
Billfish (other than swordfish)	26	18
Prohibited sharks (megamouth, basking, white)	2	0
Hammerhead sharks	4	0
Manta Ray	2	0

² Available at: <http://www.pcouncil.org/2015/09/38641/california-large-mesh-drift-gillnet-fishery-management-final-preferred-alternatives/>

³ NMFS 2017. NMFS West Coast Region Observer Program Observed Catch – 2016-17 Drift Gillnet Fishing Season, May 1, 2016 through January 31, 2017.

We remain concerned that the existing monitoring program does not provide statistically reliable estimates of numerous species caught in the DGN fishery. Current annual observer coverage remains inadequate to accurately and precisely document many marine mammal and sea turtle takes. Observer coverage levels have fluctuated widely in recent years, and despite the 30 percent observer coverage target⁴, only 10.8 percent of drift gillnet sets were observed in the 2015-16 fishing season (the lowest level in over a decade) and only 22.4 percent of sets were observed last season.

The average observer coverage level over the past ten fishing years (2007-08 to 2016-17) was just under 20 percent. NMFS acknowledged in the 2004 drift gillnet fishery Biological Opinion, and restated in the 2013 Biological Opinion that, “observer coverage in the DGN [fishery] is usually around 20 percent and so it is not possible to state with certainty the actual number of entanglements based on observer records.”⁵ Moreover, more than 80 percent of sets are unobserved and four to six vessels never take aboard any observers (18 to 27 percent of the fleet in recent years). As a result, there is potential for a serious sampling bias due to the “observer effect” as bycatch rates estimated from observed trips may not accurately reflect bycatch rates of the fleet as a whole because fishermen may behave differently when an observer is present. The potential for this bias is a major blind spot in the management of this fishery, as there is little understanding of the bycatch of whales, dolphins, pinnipeds or sea turtles on fishing trips with no observers. As recognized by the Council in its September 2015 final preferred alternative, one hundred percent observer coverage is needed for accurate and precise estimates of rare event bycatch (e.g. endangered species).⁶ Increased coverage will provide greater certainty to the fleet, the concerned public and fishery managers regarding the actual bycatch impacts of this fishery.

We request that NMFS move forward expeditiously to implement the final hard cap rule as recommended by the Council in September 2015. Likewise, we request that NMFS publish a proposed and final rule to implement 100% monitoring of the fishery by the start of the 2018 fishing season and that the agency ensure a minimum coverage level of 30 percent this year consistent with the Council’s recommendation.

⁴ In 2011 NMFS recommended 30 percent observer coverage for this fishery “to better document bycatch of rare and sensitive species.” National Marine Fisheries Service. 2011. U.S. National Bycatch Report [W. A. Karp, L. L. Desfosse, S. G. Brooke, Editors]. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-F/SPO-117E, 508 p. at 359 and in 2015 the Council recommended NMFS maintain at least 30 percent observer coverage until 2018, when the Council requested 100 percent monitoring be implemented.

⁵ NMFS. Biological Opinion on the continued management of the drift gillnet fishery under the Fishery Management Plan for U.S. West Coast Fisheries for Highly Migratory Species (May 2, 2013). At, 5.

⁶ Babcock, E. A., and E. K. Pikitch. 2003. How much observer coverage is enough to adequately estimate bycatch? Pew Institute for Ocean Science and Oceana, 36 p. Available at:

<http://oceana.org/sites/default/files/reports/BabcockPikitchGray2003FinalReport1.pdf>

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In light of the continued and persistent bycatch of marine life, including rare and endangered species, these measures are needed to fully account for and minimize bycatch in the California drift gillnet swordfish fishery. We encourage you to implement the Council recommended hard caps and monitoring measures, and transition the West Coast swordfish fishery from unselective drift gillnets to selective deep-set buoy gear.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Enticknap", with a long horizontal stroke extending to the right.

Ben Enticknap
Pacific Campaign Mgr. and Sr. Scientist

A handwritten signature in black ink, appearing to read "Geoff Shester", written in a cursive style.

Geoffrey Shester, Ph.D.
California Campaign Director & Sr. Scientist