

September 27, 2019

Mr. Simon Kineen, Chair  
North Pacific Fishery Management Council  
605 W. 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

Dr. James Balsiger, Regional Administrator  
NOAA Fisheries, Alaska Region  
709 West Ninth Street  
Juneau, AK 99802-1668

RE: Agenda Items C2 Observer Fee Analysis and C3 Observer 2020 Annual Deployment Plan

Dear Chairman Kineen, Dr. Balsiger and Council Members:

Thank you for taking comments on the North Pacific Observer Program fee increase analysis and 2020 Annual Deployment Plan (ADP). Oceana supports Alternative 2 for a fee increase that will enable the program to be fully funded. In concert with Alternative 2, we additionally support introduction of cost efficiencies by increasing observer coverage to 100% on Gulf of Alaska (GOA) trawl catcher vessels. Full coverage is more cost efficient than partial coverage and addresses data bias concerns.

Because the distribution of observer coverage in the Annual Deployment Plan is dependent on the budget from observer fee revenue, the two topics are closely connected. The North Pacific Observer Program is responsible for providing accurate and reliable data to fisheries scientists, managers, fishermen, and other stakeholders.<sup>1</sup> More observer coverage provides more fisheries data and better monitoring. Data collected by observers onboard fishing vessels is critical to sound management of federal fisheries and stewardship of Alaska's other important ocean resources. It is also necessary to ensure the National Marine Fisheries Service (NMFS) meets its mandates under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Marine Mammal Protection Act (MMPA) including the requirement to minimize bycatch and bycatch mortality to the maximum extent practicable<sup>2</sup> and the duty to obtain statistically reliable estimates of incidental mortality and serious injury of marine mammals with the goal of reducing marine mammal bycatch to insignificant levels approaching a zero mortality rate.<sup>3</sup> Accurate and reliable information is essential to NMFS's ability to meet these mandates. This can best be achieved through full observer coverage.

The Science and Statistical Committee (SSC) has repeatedly raised concerns about the low coverage rates in the partial coverage category.

***"The SSC reiterates that, while we recognize that development of variances for use in planning of deployments and stock assessment is ongoing, we urge the analysts to initiate a comparison of the likely magnitude of bias that has been detected between observed and unobserved trips with the overall magnitude and precision of discard or [prohibited species catch (PSC)] that is***

---

<sup>1</sup> <https://alaskafisheries.noaa.gov/sites/default/files/observer-prog-summary.pdf>

<sup>2</sup> 16 U.S.C. §1851(a)(9).

<sup>3</sup> 16 U.S.C. §1387(a)(1), (b), and (d).

*being monitored for compliance by management. The analysts note in the report that further clarification and conversation with the SSC is needed and we look forward to this exchange.”<sup>4</sup>*

The “observer effect,” or the change in fishing behavior while carrying an observer compared to fishing behavior without an observer, means that observer data is biased and not representative of what is being caught the whole season. During discussion of the 2018 Annual Report at the June 2019 Council meeting, the SSC members noted there is a fundamental problem with not enough observer coverage to minimize the observer effects.

Trawl strata continue to exhibit the observer effect (Table 1). For example, observed bottom trawl trips landed 26% less catch than unobserved trips in 2018. The same metric was significantly different for partial coverage bottom trawl trips in 2016 and 2017 with 40% and 20% lighter landed catches, respectively.<sup>5</sup> This bias is magnified when observer data is collected and extrapolated to unobserved catches, and does not accurately report what is truly caught. An observer effect bias in estimates is particularly concerning in the trawl fleet because of its higher overall catches and high rates of bycatch. Observer coverage should therefore be directed towards trawl to minimize the observer effect bias. The current range of possible coverage rates for trawl (14.9% - 21.7%)<sup>6</sup> is less than trawl coverage in past years, so it is likely that observer effect metrics will continue to show significant differences.

Table 1. Statistically significant (p-value < 0.05) observer effect reported for partial coverage trawl strata in 2018, adapted from the 2018 Annual Report<sup>7</sup>

Strata	Variable	Observed Difference	OD (%)	p-value
Bottom Trawl*	Landed Catch (t)	-18.648	-26.359	<0.001
Bottom Trawl*	Days Fished	-0.290	-8.889	0.011
Bottom Trawl*	Vessel Length (ft)	-4.309	-5.059	0.019
Trawl – No Tender	NMFS Areas	-0.032	-3.040	0.024
Trawl – No Tender	Days Fished	-0.256	-9.403	0.042
Bottom Trawl*	NMFS Areas	-0.089	-7.746	0.046

\* Bottom, or ‘non-pelagic’, trawl observer effect metrics were reported separately in Appendix A

Trawl fisheries have repeated issues with PSC interactions and catch accounting, as well as overages in their own directed fisheries that lead to high levels of discards. The latest available National Bycatch Report listed bottom trawl as having the highest amount of bycatch for GOA fisheries (by weight) in 2014 with 24 million pounds of bycatch.<sup>8</sup> More recently, central GOA trawlers exceeded their 2018 black cod quota by an estimated 2.4 million pounds, which was more than double their allotted quota.<sup>9</sup> As of

<sup>4</sup> [SSC minutes, NPFMC June 2019 meeting](#)

<sup>5</sup> Table A-3: [Alaska Fisheries Science Center and Alaska Regional Office. 2019. North Pacific Observer Program 2018 Annual Report. AFSC Processed Rep. 2019-04, 148 p. AFSC, NOAA, NMFS.](#)

<sup>6</sup> [NMFS. 2019. Draft 2020 Annual Deployment Plan for Observers and Electronic Monitoring in the Groundfish and Halibut Fisheries off Alaska. National Oceanic and Atmospheric Administration.](#)

<sup>7</sup> Table 3-9 and Table A-3: [Alaska Fisheries Science Center and Alaska Regional Office. 2019. North Pacific Observer Program 2018 Annual Report. AFSC Processed Rep. 2019-04, 148 p. AFSC, NOAA, NMFS.](#)

<sup>8</sup> [Benaka, L.R., D. Bullock, A.L. Hoover, and N.A. Olsen \(editors\). U.S. National Bycatch Report First Edition Update 3. 2019. U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-F/SPO-190, 95 p.](#)

<sup>9</sup> [https://www.fisheries.noaa.gov/sites/default/files/akro/car110\\_goa2018.html](https://www.fisheries.noaa.gov/sites/default/files/akro/car110_goa2018.html)

September 7, 2019, the same fishery has already caught 89% of its quota.<sup>10</sup> However, these bycatch estimates are derived from a low percentage of trips observed and sampled for species composition. Last year only 13-14% of the catch by the partial coverage bottom trawl catcher vessels was monitored by observers.<sup>11</sup> Because NMFS does not report the confidence intervals in their bycatch estimates, it is reasonable to assume that the true amount of bycatch could be much higher than NMFS reports based on the low observer coverage rate, the “observer effect” bias, and the fact that a majority of effort occurs during unobserved trawl trips. This bycatch and overages of target species result in the death and discard of millions of pounds of fish that could otherwise contribute to other directed commercial fisheries, like Pacific halibut and Chinook salmon fisheries, or the marine ecosystem food web. (See Appendix A for “Observing Our Fisheries” infographic.)

The Council should recommend 100% observer coverage on trawl vessels in the GOA to resolve concerns around PSC catch accounting and compliance monitoring while introducing cost efficiencies for observer daily rates. The 2018 Annual Report stated, “*Partial coverage by its very nature is inefficient on a cost per unit basis compared to full coverage.*” Cost per day decreases as the number of days observed increases.<sup>12</sup> Partial coverage cost \$1,380 per day while full coverage cost \$382 per day in 2018.<sup>13</sup> Using those rates and the effort in fishing from 2018, if trawl strata monitoring were increased to 100% (resulting in more sea days covered at a lower rate per day), it would increase program costs by less than \$500,000. This change in cost could be covered with a fee increase from 1.25% to 1.4%.<sup>14</sup> Therefore, Alternative 2 Option 1 in the ‘Adjust the Partial Coverage Observer Fee’ review draft would enable the program to be funded in a more efficient way. If the trawl stratum is kept in partial coverage,<sup>15</sup> a higher fee increase (Alternative 2 Option 3) will be needed as a precautionary measure to maximize revenue collected and increase coverage for trawl fishing, especially considering how the cost per day in partial coverage increases every year.

Electronic monitoring is being explored as an experimental tool for compliance monitoring of pelagic pollock trawl catcher vessels, and we look forward to an analysis of the benefits and tradeoffs of this type of monitoring for trawl vessels (see Oceana’s comment letter on the trawl EM exempted fishing permit, Agenda Item D1). The Fishery Monitoring Advisory Committee (FMAC) Subgroup Report<sup>16</sup> also provided a conceptual framework that included increasing bottom trawl coverage. The conceptual framework included a potential long-term project of a regulated GOA trawl bycatch management program that would remove all GOA trawl vessels from the partial coverage sector. Because this is a possibility for the future, it is necessary to begin analyzing this change to enable implementation. The Council process is a deliberative process, so tasking the work now is important.

---

<sup>10</sup> [https://www.fisheries.noaa.gov/sites/default/files/akro/car110\\_goa2019.html](https://www.fisheries.noaa.gov/sites/default/files/akro/car110_goa2019.html)

<sup>11</sup> Table 4-3: [Alaska Fisheries Science Center and Alaska Regional Office. 2019. North Pacific Observer Program 2018 Annual Report. AFSC Processed Rep. 2019-04, 148 p. AFSC, NOAA, NMFS.](#)

<sup>12</sup> Figure 12: [‘Adjust the Partial Coverage Observer Fee’ Public Review Draft, September 2019](#)

<sup>13</sup> [Alaska Fisheries Science Center and Alaska Regional Office. 2019. North Pacific Observer Program 2018 Annual Report. AFSC Processed Rep. 2019-04, 148 p. AFSC, NOAA, NMFS.](#)

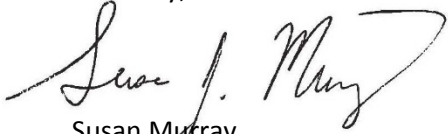
<sup>14</sup> Table 12: [‘Adjust the Partial Coverage Observer Fee’ Public Review Draft, September 2019](#)

<sup>15</sup> [NMFS. 2019. Draft 2020 Annual Deployment Plan for Observers and Electronic Monitoring in the Groundfish and Halibut Fisheries off Alaska. National Oceanic and Atmospheric Administration.](#)

<sup>16</sup> <https://meetings.npfmc.org/CommentReview/DownloadFile?p=28ae2328-236f-40b4-8a5a-eeee57f5b14.pdf&fileName=FMAC%20Subgroup%20Report%200519.pdf>

The GOA is a changing seascape and fish stock declines, like the crash of Pacific cod, emphasize the need for better monitoring, increased data collection, and timely management responses. Bycatch of highly desired species like Chinook salmon and halibut requires the diligent monitoring that can only come from having an observer on every trawl trip. If there is no increase in the observer fee and no increase in observer coverage, management will need to be more conservative when setting quotas and PSC limits. Assigning 100% monitoring to trawl vessels currently in the partial coverage category is a pathway to increase observer coverage that helps meet the goals of MSA. This management strategy should be analyzed and implemented by the Council and NMFS. We look forward to participating in continued discussions on this issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan J. Murray". The signature is fluid and cursive, with a large, sweeping "M" at the end.

Susan Murray  
Deputy Vice President, US Pacific  
Oceana

# OBSERVING OUR FISHERIES

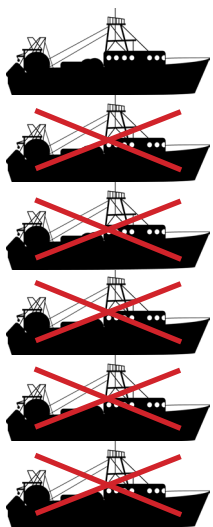
## Why Gulf of Alaska Trawl Fisheries Need 100% Observer Coverage

The Gulf of Alaska trawl fleet uses nets to target pollock, cod, arrowtooth flounder or other flatfish. These nets are indiscriminate and incidentally catch many non-target species, including high-value fish like halibut and salmon. Much of this bycatch ends up getting thrown back into the water either injured or dead.

### FISHERY OBSERVERS



Fishery observers are trained scientists who identify, count, and monitor what fishing vessels catch. They report that data to NMFS to inform fisheries management, both in-season and in the long term. Having a fishery observer on board every vessel is essential to effectively monitor and reduce bycatch.



Bottom trawl catcher vessels in the Gulf of Alaska are "partial coverage," meaning only **1 in 6 trips** were observed in 2018.<sup>1</sup>

### BLACK COD

In the central Gulf of Alaska, trawlers exceeded their 2018 quota of black cod by **more than double**, discarding millions of dead and injured black cod that could have supported future fisheries.<sup>6</sup>

**2018 Quota = 2.3 million pounds**

**Amount actually caught = 4.7 million pounds**



### PACIFIC HALIBUT

In 2017, deep water flatfish bottom trawlers caught

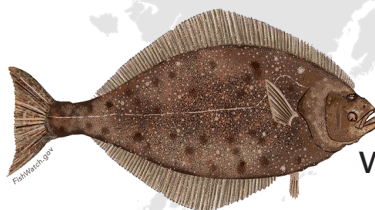


**\$6 million** worth of arrowtooth flounder in *targeted catch*<sup>2</sup>

and *discarded*

**\$9.7 million**

worth of Pacific halibut as *bycatch*<sup>2,3</sup>



### CHINOOK

In 2018, in the central and western Gulf of Alaska, trawlers caught *nearly 17,000* Chinook salmon as bycatch.<sup>4</sup> For comparison, in that same year, the total allocation of Chinook for all sport fishermen in Southeast Alaska was 23,900.<sup>5</sup>



### THE OBSERVER EFFECT

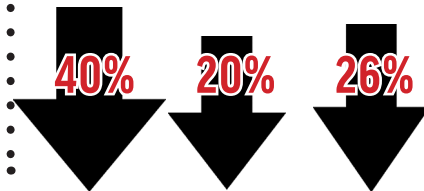
The observer effect is a well-documented effect in partial-coverage fisheries where fishing behavior changes with an observer on board. It means observed trips don't represent unobserved trips. For the last three years of available data, bottom trawl trips with observers on board caught, on average, **30 percent less** than unobserved trips.<sup>1</sup>

**2016 2017 2018**

**40%**

**20%**

**26%**



**100% observer coverage is essential.**



Without fishery observers on every fishing trip, managers can't know the true amount of bycatch. With change happening in our oceans at unprecedented rates due to climate change, it is imperative that managers are armed with the best information possible. Full observer coverage means more accurate and representative data, as well as better real-time data allowing managers to respond quickly and effectively. **100% observer coverage is vital to the health of our oceans and the fisheries that rely on them.**