

Developing Alternatives for Observer Coverage on Bering Sea/Aleutian Islands Trawl Catcher Vessels¹

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1 Background

The North Pacific Fishery Management Council (Council) has identified a need to develop alternatives for an action that would place catcher vessels (CV) trawling in the Bering Sea/Aleutian Islands (BSAI) into the full observer coverage category. The scope of the potential action is not yet fully defined. For example, the range of action alternatives might reclassify all trawl CVs that participate in a certain fishery or area, or only those that elect full observer coverage. The action alternative could place the affected vessels in full coverage during all fishing activity, during any BSAI fishing, or only while participating in a certain directed fishery such as BSAI Pacific cod trawl. The Observer Advisory Committee's (OAC) recommendations regarding a problem statement and alternatives will inform the scope of the Council's action, should the Council decide to move this issue forward for Initial Review.

The impetus for this potential action is the observer coverage requirements for the BSAI limited access Pacific cod trawl fishery. CVs participating in that fishery were placed in the partial observer coverage category when the North Pacific Groundfish and Halibut Fisheries Observer Program (Observer Program) was restructured in 2012². Partial observer coverage was, and is still, deemed sufficient to provide the data necessary to manage that fishery. Moreover, since the BSAI Pacific cod limited access fishery is not a catch share program (Limited Access Privilege Program, or LAPP) and is not managed with transferable allocations of prohibited species catch (PSC)³, trawl CVs participating in the fishery are not required to be in full coverage. However, some CV owners and fleet representatives from the BSAI Pacific cod trawl fleet have submitted public comments stating that they want to carry full observer coverage in order to closely monitor and internally manage the portion of the BSAI trawl limited access sector allocation of halibut PSC that is attributed to their vessels. NMFS manages the halibut PSC limit for the BSAI Pacific cod trawl limited access sector by accruing halibut PSC from the AFA trawl catcher vessels, non-AFA trawl catcher vessels, and the non-Amendment 80 trawl catcher/processors, combined. Halibut PSC for vessels in partial coverage and without an observer onboard the vessel is estimated based on PSC rates that are generated from other observed vessels. CVs that are members of AFA cooperatives wish to manage and monitor their halibut PSC more closely, and want the option of voluntarily taking full coverage to do so⁴.

¹ Prepared by Sam Cunningham, NPFMC Staff. Data support provided by Michael Fey (AKFIN).

² The final rule for BSAI Groundfish FMP Amendment 86/GOA Groundfish FMP Amendment 76 was published in the Federal Register on November 21, 2012 (77 FR 70062), and the new management regime went into effect for the 2013 fishing year.

³ For species such as Pacific halibut or Chinook salmon.

⁴ AFA vessels are also under sideboard limits for halibut PSC.

Since 2013, National Marine Fisheries Service (NMFS) has allowed BSAI Pacific cod trawl CV owners to voluntarily select full coverage by petitioning NMFS on or before December 1 of the preceding calendar year (see example letter to NMFS in Appendix). Voluntary participation in the full coverage category is subject to the following conditions: (1) they stay in full coverage for all of that year's BSAI fishing, (2) they continue to log all non-AFA pollock trips into the Observer Declare and Deploy System (ODDS) for observer selection, (3) they pay an observer provider "out of pocket" for the daily cost of a full coverage observer, and (4) they continue to pay the observer fee liability for landings that are subject to the fee. The fee is currently set at 1.25% of the ex-vessel value of the catch subject to the fee (\$679.55)⁵.

The net effect of the aforementioned requirements is that BSAI Pacific cod trawl CVs that are also members of an AFA cooperative are paying two types of observer costs under the status quo. Placing those CVs in the full coverage category would relieve them of the 1.25% ex-vessel fee, and could provide improved observer data for vessels volunteering for full coverage by reducing the number of unobserved trips for which PSC estimation is based on extrapolated rates. However, depending on how the ability to volunteer into the full coverage category is structured, NMFS may experience increased administrative costs and additional complications in management and enforcement of the BSAI fisheries. CVs volunteering for full coverage must be manually entered into the Alaska Region's Catch Accounting System (CAS) to ensure that catch estimates for vessels in full coverage and those in partial coverage can be computed properly. Additional costs would be incurred each time a CV is allowed to switch between full and partial coverage. In addition, monitoring and enforcement would be complicated if NMFS and other enforcement agencies have to determine a CV's required coverage rate for particular time periods, directed fisheries, or areas smaller than an FMP management area (BSAI or GOA). Before taking action, the Council and NMFS would need to be aware of the net effect that a reduction in effort and the partial coverage fee revenue might have on the effective observer coverage rate for the CVs that remain in the partial coverage category. That issue would be examined as part of a full analysis (Initial/Public Review) if the action moves forward.

2 Analytical Considerations

In developing alternatives to be analyzed, the OAC has several "big picture" considerations to weigh. First, the alternatives should define the fleet of vessels that would be impacted by this action; in other words, the analysts should be able to interpret how many CVs might be moved from one observer coverage category to another as a result of the action. Second, the alternatives should state when and for how long a vessel would be fishing under a different coverage category. The shift from partial to full coverage could apply for the whole calendar year or for as little as a portion of a year (trips made in a certain directed fishery in a certain management area). Third, the alternatives should state whether CV owners are making a one-time choice as to where their vessel will fit into observer regulations, or whether that determination could be made on an annual basis. Finally, the OAC should consider how an alternative might affect NMFS's administrative burden (such as tracking vessel activity to move CVs in and out of a coverage category), and whether the ex-vessel revenues associated with the number of CVs exiting the partial coverage fleet could reduce the partial coverage fee base to an extent that available funds are not sufficient to deploy partial coverage observers at present rates.

The OAC may also wish to consider the range of alternatives in the context of other developing Council actions that might also affect CV assignments to the partial or full coverage categories, and other activities that would need to be funded through the partial coverage fee base. In addition to this action, the

⁵ Ex-vessel revenue is determined after the fact by applying a standard average dock price (per pound) to the delivered weight.

Council is considering allowances for small catcher/processors (CP) to move from full to partial coverage. In October 2015, the Council will begin to discuss whether CVs fishing with trawl gear in the GOA should be subject to full observer coverage, which would reduce both effort in partial coverage fisheries and ex-vessel fees paid into the partial coverage category. The Council is also monitoring data to determine whether changes are needed in the regulations that govern observer coverage on CVs that deliver to tender vessels; those vessels might have to log more “trips” in the ODDS system, and more partial coverage observer days might be required. Also, the Council and NMFS are testing electronic monitoring (EM) technology. If the Council recommends that EM become part of the Annual Deployment Plan for observer coverage, some portion of the observer fee base would be used to administer that activity.

To the extent possible, NMFS hopes to minimize the number of instances in which a CV’s coverage category would depend on the area or directed fishery in which it is participating at the moment and the allowances for switching between full and partial coverage during a year. If the action that would place all GOA trawl CVs in full coverage moves forward, having more CVs in full coverage during BSAI fishing would become relatively more attractive from a standpoint of management costs.

Defining observer coverage requirements by directed fishery would increase the Agency’s management burden, relative to placing a vessel in a certain category for all activity in a given area or for the entire year. If participating in particular fisheries triggered full or partial coverage, then NMFS and the vessels would need to know ahead of time the vessels intended activity for the upcoming trip. However, the intended activity might end up being different from the realized fishery “target.” CAS assigns a trip target species based upon the predominant species in a delivery, and sometimes this “realized trip target” is different from the vessel’s intended fishery target. For example, a vessel might make a trip that is intended to target Pacific cod, but might catch more flatfish and, thus, the trip would be noted after-the-fact as having targeted flatfish. If being in full or partial coverage was dependent on the fishery, then dealing with this type of mismatch between intended and realized trip target would make the management of partial coverage more complicated to manage and enforce. Estimating ex-vessel-based partial coverage fees could also be somewhat more complicated if trips appearing as flatfish targets were actually subject to full coverage because the vessel was (potentially) operating in a full coverage BSAI Pacific cod trawl fishery.

As this action moves forward, the Council has asked staff to monitor the ability of full coverage observer providers to meet deployment needs. Preliminary conversations with providers do not indicate reservations about their ability to meet the potential increase in required observer days. Staff will continue to communicate with providers, and will work to understand and report their business considerations as the range of alternatives is more narrowly defined. As a corollary to increased demand for full coverage, staff will also need to assess whether or not the range of alternatives might impact the Region’s contract with its partial coverage provider.

3 Potential Problem Statement

The following problem statement is provided by staff as a starting point for the OAC's discussion:

Since 2013, NMFS has allowed the owners of some BSAI trawl catcher vessels in the partial observer coverage category to volunteer on an annual basis for full observer coverage during all times that they participate in BSAI fisheries. Individuals who have made this choice thus far are owners of AFA catcher vessels that participate in the BSAI limited access Pacific cod trawl fishery. They choose full coverage to better manage Pacific halibut prohibited species catch (PSC) limits within their cooperatives. Current regulations do not authorize voluntary selection of full coverage. Vessel owners who choose full coverage must pay both the ex-vessel based partial coverage observer fee and a daily full coverage observer rate. The Council recognizes that this is an additional financial burden to the vessel owners who voluntarily choose full coverage. Therefore, an amendment to the regulations implementing the North Pacific Groundfish and Halibut Observer Program may be warranted. The Council seeks to balance the cost burden for BSAI catcher vessel owners with NMFS's ability to monitor and enforce compliance with observer coverage requirements, and the essential functioning of the Observer Program's partial coverage category.

The OAC may recommend that the scope of the problem statement should be less specific to the BSAI CV fleet that participates in the Pacific cod trawl fishery, if that is more in line with the range of alternatives that the committee develops.

4 Potential Alternatives

The following alternatives are provided by staff as a starting point for the OAC's discussion.

Alternative 1. Status quo.

Alternative 2. Require full observer coverage for all trawl CVs fishing in the BSAI.

[Note: The Council may wish to consider this alternative for analysis to be consistent with its request for a discussion paper on full observer coverage for all GOA trawl catcher vessels.]

Alternative 3. Allow CVs currently assigned to partial observer coverage to voluntarily choose full observer coverage.

Element 1. Vessel (owners) eligible to make this choice.

[Note: Eligibility would not be contingent upon past participation in a particular fishery. The vessel would be required to have the permits and licenses necessary to participate in the fishery identified in the options below.]

Option 1. Owners of a trawl CV that intends to participate in the BSAI Pacific cod fishery in the upcoming year.

Option 2. Owners of any trawl CV that intends to participate in any BSAI groundfish fishery in the upcoming year.

Option 3. Owners of any trawl CV that intends to participate in any groundfish fishery off Alaska in the upcoming year.

Option 4. Owners of any vessel that is in the partial coverage category.

[Note: This would include all gear types, such as HAL IFQ vessels.]

Element 2. Time at which this choice must be made (as a request to NMFS).

Option 1. One-time selection (applies in future years).

Option 2. Annual selection (selection cannot be reversed).

[Note: NMFS recommends that the deadline for voluntary selection of full observer coverage should be July 1 of the prior year. Knowledge of which vessels will be in the partial coverage category is needed to project effort in the partial coverage category in the upcoming year. Projected effort is a key component of developing the draft Annual Deployment Plan, and establishing the observer deployment rates that can be achieved with a given budget.]

Element 3. Circumstances in which the selection of full observer coverage would apply.

Option 1. While participating in any BSAI fishery that is subject to observer coverage (under 50 CFR Part 679), for the entire calendar year.

[Note: This is the NMFS policy that has been in effect for fishing years 2013 through 2015 due to the administrative costs and complexity of the CAS when allowing vessels to move between full and partial observer coverage.]

Option 2. While participating in any fishery in the FMP management area that is subject to observer coverage (under 50 CFR Part 679), for the entire calendar year.

Option 3. While participating in the BSAI Pacific cod trawl fishery.

Option 4. While participating in any BSAI or GOA groundfish fishery (**Suboption:** trawl fishery).

5 Data and Participation Summary

5.1 Overview and Caveats

This section provides records of fishery participation at the annual level. The universe of vessels considered here includes any CV that harvested groundfish with trawl gear in either the BSAI or GOA area during the 2010 to 2014 time period. This historical range captures the five most recent years for which complete fishery data is available. NMFS has responded to requests to be placed in the full observer coverage category by the owners of BSAI trawl CVs since 2013. Staff chose to include earlier years in this summary data in the case that it might inform the discussion of how this considered action relates to other ongoing Council actions. For example, the Council's recommendation for this action could influence (or be influenced) by an action to require full coverage in GOA groundfish trawl fisheries; the GOA action is subject to control dates that could limit qualifying catch history to that which occurred in 2012 and earlier. In any case, staff determined that if the source data for the tables that follow went back to 2010, then it could be reused – for consistency – for analyses of related actions.

The following data require several caveats:

- With the exception of the participation matrix in Table 2, AKFIN provided data from NMFS Catch Accounting System (CAS). Prior to the implementation of the Restructured Observer Program in 2013, CAS only picked up halibut records from observer data; in other words, catch recorded on unobserved trips do not appear. For that reason, tables and statements that reference ex-vessel revenues look only at 2014. Staff also felt that a single-year snapshot would be more easily understood, and would rely less on multi-year averages.

- CAS does not capture fishery data from the rationalized BSAI crab fisheries. While harvest and revenue data for crab activity is missing, participation is captured in Table 2.
- AKFIN's identification "flag" for AFA vessels is applied at an annual level. Unlike the CGOA Rockfish Program, where one vessel's activity can be sorted by what occurred within or outside of its Rockfish Cooperative, the only way to assess whether an AFA-affiliated vessel was fishing under the co-op is to sort by trips that targeted pollock. This is likely a good indicator, given that a trip is only classified as a pollock trip if nearly all of the delivered fish were pollock. However, there could be a case where an AFA pollock trip only yielded, say, 90% pollock. That trip might show up with a BSAI non-pollock target, which we are assuming here to be a partial observer coverage fishery. The data can be cleaned to sort this out prior to further analysis. NMFS has advised Council staff that AFA pollock trips can also be identified by the gear type being used (i.e. pelagic trawl). Staff will assess whether the data used in this report are already capturing AFA activity correctly, without confusion caused by non-pollock "realized trip targets."
- This document references "fishing days" for the purpose of estimating the cost of full observer coverage. Here, fishing days are drawn from CAS where staff can see the number of calendar days on which catch was brought on board. However, a vessel may spend one or more days between the time it leaves port with an observer and the time it brings fish onboard, and a full coverage vessel would have to pay a daily observer rate for the days in between. The date that a vessel leaves port is recorded in the vessel's paper logbook, but that information is not captured in CAS. In the past, Alaska Fisheries Science Center (ASFC) staff has tested data to hone in its estimates of required coverage for its Annual Deployment Plan, and found that simply adding one day to the difference between the fishing "start" and "end" dates – as recorded by CAS – is a good estimate of total observer time spent onboard.

Because the data included in this document is defined at the trip target level, "fishing days" can be added together without risk of double-counting. In other words, both the fishing days and the total harvest weight reported for a trip where Pacific cod and flatfish are caught jointly would all be reported under the target for the predominate species on the trip (e.g. Pacific cod). Fishing days and harvest weight for flatfish on that trip would not also be reflected in the field describing the flatfish target.

- The source data for the following tables included catch that occurred in "inside State waters," but those data were excluded from this report because they were not identified with a specific management area (BSAI or GOA). Excluding state-waters catch likely means that the following tables underestimate total catch and ex-vessel revenues in the partial coverage category, but not by a large amount. Catch occurring inside of three nautical miles that accrued to a federal TAC can be further identified and included in any subsequent analysis.

The purpose of including the following data is to describe the CV fleet that might be impacted by the considered action. The OAC and the Council might be interested in which fisheries these vessels prosecute, how much they pay into the partial observer coverage fee base (via the 1.25% ex-vessel fee), and the approximate number of days they spend out of port. Understanding the cross-over in fishery participation should help to link this Council action to other pending decisions, such as whether or not to require full observer coverage for CVs trawling in the GOA. A rough estimate of how many fishing days these CVs currently spend in partial coverage fisheries could reflect the number of additional full coverage observer days that might be required as a result of this action.

The following tables describe the CV fleet at different levels: vessels that used trawl gear in either area, vessels that used trawl gear in both areas, and vessels that have voluntarily carried full observer coverage in the BSAI Pacific cod trawl fishery. Ex-vessel revenue and fishing days are presented by trip target species, to better indicate whether the harvest activity was already subject to full observer coverage.

AFA-affiliated CVs that were harvesting BSAI pollock would have been in full coverage during the analyzed years, as would GOA harvest that occurred under the CGOA Rockfish Program.

5.2 Estimated Cost Per Day for Full Coverage

NMFS estimates the cost per day for full observer coverage in its Observer Program Annual Report. The most recent Annual Report was published for 2014⁶. Observer providers submit copies of all invoices for observer coverage, and NMFS staff compile them to calculate the average cost of full coverage. The 2014 Annual Report cites the average daily rate for trawl CVs as \$331 (Figure 2-1 on page 34 of the Annual Report cited in Footnote 6). The 2014 Annual Report contains a full coverage cost per day estimate that includes fixed costs (e.g. travel costs) for the full coverage category as a whole, but that estimate is not specific to each vessel and/or processor type; staff could further refine this estimate in the course of a full analysis.

5.3 Fleet Description

During the 2010 through 2014 period, 157 unique CVs trawled in either the BSAI or GOA. One hundred and twenty-two of these CVs fished in the BSAI, and 84 vessels fished in the GOA; 49 of those vessels fished in both areas. Nine of the vessels that fished in both areas were smaller than 60' LOA. Overall, the set of vessels described here range in LOA from 43' to 200'. As of 2015, all vessels using trawl gear are in the Trip Selection stratum. Prior to 2015, vessel length was a determinant of trip selection rates in the partial observer coverage category.

Table 1 Vessel length groups for CVs that trawled during the 2010 through 2014 period

Vessel length (ft. LOA)	# Vessels
< 60	32
60 - 124	95
> 124	30
Total	157

Table 2 provides a snapshot of participation across Alaska fisheries by the 144 CVs that trawled in the BSAI or the GOA during 2014. Of particular note, 75% (36 of 48) of the CVs that trawled for BSAI Pacific cod also participated in the AFA pollock fishery, and thus would have had an incentive to volunteer for full coverage to better account for use of their AFA cooperative's halibut PSC limit. In fact, Table 3 shows that 37 of the 48 Pacific cod trawl CVs volunteered to be placed in full coverage for 2014. Though not apparent from Table 2, 25 of those CVs trawled in both the BSAI and the GOA in 2014 (and so they would be part of the affected CV vessels in the separate discussion paper for 100% coverage for GOA trawl CVs); 13 of those 25 vessels trawled in the GOA and the BSAI *Pacific cod* trawl fishery.

⁶ NMFS. 2015. North Pacific Groundfish and Halibut Observer Program 2014 Annual Report. National Oceanic and Atmospheric Administration, 709 West 9th Street. Juneau, Alaska 99802. It is also available as part of Agenda Item C-4 for the NPFMC's June 2015 meeting.

Table 2 Fishery-level vessel counts for all CVs that trawled in the BSAI or GOA in 2014

	GOA Pollock TRW	GOA Pacific Cod TRW	GOA Other GFish TRW	CGOA Rockfish Prog.	AFA Pollock	BSAI Pacific Cod TRW	BSAI Other GFish TRW	Halibut/Sablefish IFQ	Rationalized Crab
GOA Pollock TRW	68	54	29	28	19	11		11	
GOA Pacific Cod TRW		55	27	25	11	6		10	
GOA Other GFish TRW			29	25	11	6		2	
CGOA Rockfish Prog.				28	13	5		2	
AFA Pollock					86	36		1	1
BSAI Pacific Cod TRW						48	4		1
BSAI Other GFish TRW							4		
Halibut/Sablefish IFQ								11	
Rationalized Crab									2

Sources: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA; ADFG/CFEC Fish Ticket data compiled by AKFIN in Comprehensive_FT.

5.3.1 Full Observer Coverage “Volunteer” CVs

The owners of 46 CVs have requested that NMFS place their vessel in the full observer coverage category for at least one of the three fishing years from 2013 through 2015 (Table 3). Each of those 46 vessels is a member of an AFA cooperative; none fished community development quota (CDQ) during the analyzed period. These “volunteer” vessels range in length between 85’ and 149’ LOA. Thirty-nine of the 46 are less than 125’ LOA.

Table 3 Number of trawl CVs that voluntarily participated in the full observer coverage category, and total number of trawl CVs that participated in the BSAI Pacific cod fishery, 2013-2015 (through 5/6/2015)

Number of Trawl CVs...	2013	2014	2015
Volunteering for full coverage	40	37	31
Total in BSAI Pacific cod fishery	53	48	48

Source: Provided by NMFS Alaska Region Office Sustainable Fisheries Division.

The “volunteer” fleet fishes almost exclusively with trawl gear. One CV in this group used hook-and-line (HAL) gear to target Pacific cod and halibut in the GOA during one year⁷. This set of vessels primarily targets pollock and Pacific cod when trawling in the BSAI. CAS shows three CVs that each recorded *de minimis* target harvests of other groundfish species; these records are likely the result of incidental catch (Atka mackerel, rock sole, and yellowfin sole) outweighing Pacific cod catch on a particular trip. Four of the 46 volunteer CVs do not show any non-pollock target fishing during the analyzed period. One of

⁷ It is possible that other vessels in this group used HAL gear to fish for halibut on an unobserved trip prior to 2013, but CAS did not pick up that activity prior to the restructuring of the Observer Program. However, given the general pattern of activity for these vessels, that is not likely. This assumption can be re-checked upon further analysis.

those vessels is appearing on the volunteer-roster for the first time in 2015. It is possible that the other three requested full coverage in case they chose to target BSAI Pacific cod, but did not end up making any cod trips.

Table 4 and Table 5 show the aggregate number of days on which volunteer CVs brought fish onboard, as defined by the target species assigned to that trip by CAS. As noted above, fishing days is likely a slight underestimate of the number of days for which a full coverage observer would have to be onboard. Table 5 focuses on the 14 volunteer CVs that have trawled in the GOA during the 2010 through 2014 period. Eight of those 14 CVs were active in the GOA during all five years, one was active in four of the five years, one was active in two years, and the others were each active in the GOA for one year. Five of the 14 CVs made landings for a CGOA Rockfish Program cooperative; four of those five did so in each of the analyzed years. The 14 CVs captured in Table 5 range in LOA from 90' to 124'. Twelve made trips targeting GOA pollock. Nine targeted GOA Pacific cod, and 15% of their ex-vessel GOA Pacific cod revenues came from Rockfish Program catch. Six vessels targeted GOA shallow water flatfish, two targeted GOA arrowtooth flounder, one targeted GOA rex sole, one targeted GOA flathead sole, and one targeted GOA deep water flatfish. The five volunteer CVs that targeted GOA sablefish were the same that targeted GOA rockfish, and all trips targeting rockfish and sablefish occurred under the Rockfish Program.

Table 4 Total fishing days in the BSAI for the 46 CVs that have volunteered for full coverage (by target)

Year	Pacific Cod	Pollock	Total
2010	262	981	1,243
2011	336	1,551	1,887
2012	356	1,410	1,766
2013	357	1,440	1,797
2014	364	1,361	1,725
Total	1,675	6,743	8,418

Notes: A small, confidential number of vessels recorded trips that targeted BSAI rock sole, yellowfin sole, and Atka mackerel; the "volunteer" vessels did not use any non-trawl gear during the examined period.
Source: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA .

Table 5 Total fishing days in the GOA for 14 of the 46 CVs that have volunteered for full coverage in BSAI trawl fisheries (by target)

Year	GOA Limited Access Trawl				Central GOA Rockfish Program				
	Pacific Cod	Pollock	Flatfish	Total	Pacific Cod	Flatfish	Rockfish	Sablefish	Total
2010	30	97	5	132	4		20	3	27
2011	32	83	C	*	C	C	15	6	26
2012	24	126	*	*	4		22	C	*
2013	17	163	10	190		C	18	6	*
2014	6	216	3	225	*		20	C	24
Total	109	685	29	823	*	*	95	18	130

C = confidential data; * denotes data redacted to preserve confidentiality.
Source: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA .

The following is a high-level summary of 2014 ex-vessel revenues and fishing days for the 46 volunteer CVs. The contribution of these vessels to the partial coverage observer fee base could be estimated by multiplying ex-vessel revenues by 1.25%. The cost of carrying a full coverage observer could be estimated by multiplying the number of fishing days by the average daily rate for an observer (\$331), noting that fishing days is likely a slight underestimate of the number of days that an observer would have needed to be onboard.

BSAI activity:

- 36 of 46 vessels made trips targeting Pacific cod with trawl gear
 - Total ex-vessel revenue was ~\$13.8 million (average ~\$384,000/vessel; median ~\$360,000/vessel)
 - 364 fishing days in total during 2014, with an average of 10 days/vessel (maximum = 27 days, 75th percentile = 14.5 days, median = 8 days, 25th percentile = 5.75)
 - The vessel-level correlation between fishing days and ex-vessel revenues was strongly positive (0.927), where 1.000 indicates a perfect positive correlation and 0.000 indicates no correlation at all.
- 41 of 46 vessels made trips targeting pollock with trawl gear as part of an AFA cooperative
 - Total ex-vessel revenue was ~\$76.4 million (average ~\$1.9 million/vessel; median ~\$2.1 million/vessel)

GOA activity:

- 10 of the 14 previously identified vessels trawled in the GOA in 2014
- Limited access fisheries (non-CGOA Rockfish Program)
 - All 10 made trips targeting GOA pollock with trawl gear
 - Total ex-vessel revenue was ~\$6.9 million (average ~\$688,000/vessel; median ~\$811,000/vessel)
 - 216 fishing days in total during 2014, with an average of 22 days/vessel (maximum = 35 days, minimum = 3 days)
 - 3 vessels made trips targeting GOA Pacific cod with trawl gear
 - Total ex-vessel revenue was ~\$91,000
 - Six fishing days in total during 2014
 - Pacific cod trips accounted for 70% of non-pollock ex-vessel revenues in the GOA for these vessels
 - The remaining 30% of ex-vessel revenues was generated on trips that targeted rex sole, arrowtooth flounder, and deep water flatfish
- Central GOA Rockfish Program
 - 5 of the 10 vessels active in the GOA during 2014 participated in the Rockfish Program
 - Total ex-vessel revenue was ~\$1.1 million
 - 24 fishing days in total during 2014 (maximum = 11 days, median = 3 days, minimum = 2 days)
 - 3 vessels recorded a trip with a Pacific cod target
 - 1 vessel recorded a trip with a sablefish target

5.3.2 All Other Trawl CVs

Aside from the 46 CVs that have volunteered for full observer coverage in the BSAI Pacific cod trawl fishery, 111 other CVs have participated in Alaska trawl fisheries since 2010. Depending upon the Council's preferred alternative for this, or other, potential actions, these vessels could either remain in the partial coverage category or be placed in full coverage. Recall that harvest made in the BSAI pollock trawl (AFA) fishery and in the CGOA Rockfish Program is already subject to full observer coverage.

The non-volunteer CVs ranged in LOA from 43' to 200'; 32 vessels were less than 60' LOA (29 were 58 LOA), 56 vessels were between 60' and 124' LOA, and 23 vessels were 125' LOA or greater. Seventy-six CVs fished in only one FMP area (41 in BSAI and 35 in GOA), while 35 CVs fished in both areas. Fifty-one of the 111 CVs are affiliated with AFA cooperatives, while 60 CVs are not. Table 6 and Table 7 describe the participation of these 111 CVs in BSAI and GOA fisheries, respectively. Table 7 is broken out by AFA and non-AFA affiliated vessels; activity by those vessels is broken out to show catch that occurred within and outside of the CGOA Rockfish Program (RP). Recall that the RP is currently subject to full observer coverage.

Table 6 Non-volunteer CVs that participated in BSAI trawl fisheries, 2010 through 2014

Target Fishery	AFA	Non-AFA	Total
PCod TRW	13	21	34
Pollock TRW	50	3	53
Flatfish/Other TRW*	3	5	8
Rockfish TRW	0	3	3
Halibut HAL**	0	1	1
PCod POT	0	3	3
Total	51	25	76

* Targets include Alaska plaice, arrowtooth flounder, flathead sole, rock sole, yellowfin sole, Kamchatka flounder, and Atka mackerel.

** Note that other CVs may have targeted halibut with HAL gear during the 2010 through 2012 period, prior to the Observer Program restructuring.

Table 7 Non-volunteer CVs that participated in GOA trawl fisheries, 2010 through 2014

Target Fishery	Non-AFA		AFA		Total
	Non-RP	RP	Non-RP	RP	
PCod TRW	53	11	11	9	64
Pollock TRW	52	0	14	2	66
Flatfish TRW	24	6	10	0	34
Rockfish TRW*	18	18	9	9	27
Sablefish TRW**	10	10	8	8	18
Total	56		14		70

Note: Rockfish Program (RP) activity is captured at the vessel-level within each year, so RP and Non-RP vessel counts are not additive.

* 3 Non-AFA vessels made non-RP trips that targeted rockfish, and 1 AFA vessel made a non-RP trip that targeted rockfish.

** 2 AFA vessels made non-RP trips that targeted sablefish.

Of the 70 CVs captured in Table 7, 17 vessels prosecuted halibut (IFQ) with HAL gear. Two of those vessels were affiliated with AFA cooperatives. Four of those 17 vessels also fished sablefish IFQ with HAL gear; those vessels were not affiliated with AFA cooperatives. Twenty-seven vessels fished for GOA Pacific cod with pot gear; all were less than 60' LOA, and none were affiliated with an AFA cooperative. One non-AFA vessels fished for Pacific cod with jig gear.

Table 8 through Table 10 reflect the fishing activity of the non-volunteer CVs in 2014, as measured by ex-vessel revenues and fishing days. Table 8 shows the BSAI activity and revenue of the 76 CVs that did not volunteer for full observer coverage, but deployed trawl gear in the BSAI. Table 9 shows the GOA activity and revenue of the 70 CVs that did not volunteer for full observer coverage, but deployed trawl gear in the GOA. Table 10 shows the GOA activity and revenue for the 44 CVs that did not volunteer for full observer coverage, but deployed trawl gear in both the GOA and the BSAI areas. (Note that the activity vessels captured in Table 10 are also reflected in Table 8 and Table 9.

Table 8 2014 ex-vessel revenues (\$), total fishing days, and vessel counts for BSAI CVs that did not volunteer for full coverage during the 2013 through 2015 period (by trip target)

		AFA	Non-AFA	Total
Pacific Cod	Ex-Vessel	1,732,459	3,694,296	5,426,755
	Fishing Days	65	173	238
Pollock	Ex-Vessel	118,592,093	C	*
	Fishing Days	1,474	C	*
Flatfish	Ex-Vessel	C	4,766,145	*
	Fishing Days	C	200	*
Rockfish	Ex-Vessel		1,228,538	1,228,538
	Fishing Days		46	46

C = confidential data; * denotes data redacted to preserve confidentiality.

Source: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA .

Table 9 2014 trawl ex-vessel revenues (\$), total trawl fishing days, and vessel counts for GOA CVs that did not volunteer for full coverage during the 2013 through 2015 period (by trip target)

		Limited Access		Rockfish Program		Total
		AFA	Non-AFA	AFA	Non-AFA	
Pacific Cod	Ex-Vessel	836,665	8,929,505	182,669	466,530	10,415,369
	Fishing Days	22	416	5	10	453
Pollock	Ex-Vessel	10,041,132	24,162,034			34,203,165
	Fishing Days	296	1,060			1,356
Flatfish	Ex-Vessel	2,175,242	3,360,874		C	*
	Fishing Days	78	139		C	*
Sablefish	Ex-Vessel			217,212	409,752	626,963
	Fishing Days			4	7	11
Rockfish	Ex-Vessel			1,205,571	2,925,709	4,131,280
	Fishing Days			33	91	124

C = confidential data; * denotes data redacted to preserve confidentiality.

Source: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA .

Table 10 2014 trawl ex-vessel revenues (\$), total trawl fishing days, and vessel counts for GOA CVs that also trawled in the BSAI, but did not volunteer for full coverage during the 2013 through 2015 period (by trip target)

		Limited Access		Rockfish Program		Total
		AFA	Non-AFA	AFA	Non-AFA	
Pacific Cod	Ex-Vessel	836,665	4,480,425	182,669	215,167	5,714,926
	Fishing Days	22	185	5	4	216
Pollock	Ex-Vessel	10,041,132	10,360,600			20,401,732
	Fishing Days	296	421			717
Flatfish	Ex-Vessel	2,175,242	612,021			2,787,263
	Fishing Days	78	31			109
Sablefish	Ex-Vessel			217,212	209,952	427,163
	Fishing Days			4	3	7
Rockfish	Ex-Vessel			1,205,571	1,203,860	2,409,431
	Fishing Days			33	31	64

Source: Catch Accounting System data compiled by AKFIN in Comprehensive_BLEND_CA .

Depending upon the OAC's recommendation for alternatives, staff could break out this data further to show activity and revenues by whether the delivery was made to a shoreside processing plant or to a mothership. Once alternatives are developed, staff could also identify the number of trawl CVs that do not participate in any fishery that *could be* subject to full observer coverage; that number would constitute the portion of the fleet whose ex-vessel fees would not be subtracted from the partial coverage observer fee base.

Appendix

EXAMPLE LETTER REQUESTING FULL COVERAGE IN BSAI PACIFIC COD FISHERY

(Include your return mailing address)

(Date your letter)

James W. Balsiger
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99801

Dear Dr. Balsiger:

We are writing to request that the National Marine Fisheries Service assign the attached list of vessels with 100% observer coverage for 2015 while these boats are fishing in the Bering Sea Aleutian Islands (BSAI) in 2015. This will enable trawl catcher vessels in the BSAI Pacific cod fishery to take observer coverage in addition to that required for the partial observer coverage category.

We understand that we will be required to comply with all applicable regulations, including logging all fishing trips that are not AFA pollock prior to the start of a trip. Trips will be logged in the Observer Declare and Deploy System (ODDS).

Once the trips are logged, we understand that we will procure an observer through one of the five certified observer providers and pay for this observer coverage directly to the observer providers. In addition, we understand that the observer fee liability under §679.55 would continue to apply.

We agree to, and understand, the following:

1. individuals taken over and above existing observer coverage requirements are observers as defined at §679.2;
2. vessel owners and operators will comply with the prohibitions protecting observers that are at §679.7(g) and will meet the vessel responsibilities described at §679.51(e);
3. vessel owners and operators are subject to general requirements applicable to observers described at §600.746;
4. vessel owners or operators must log all fishing trips and follow applicable regulations when they are in the partial coverage category; and
5. landings will be subject to the observer fee under §679.55.

Sincerely,