

**Preliminary Review:
Deployment of Observers on Catcher Vessels
Delivering to Tender Vessels**
June 2014¹

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1 Introduction

At the December 2013 meeting, the Council initiated a regulatory amendment to change the deployment of observers on catcher vessels in the partial coverage observer category while delivering to tender vessels. The Council initiated the amendment package based on information in the 2014 Annual Deployment Plan (ADP), which identified that tender activity in the GOA may represent an important source of variance and/or bias in catch data from the partial coverage category. Specifically, the analysis considers deploying observers for catcher vessels from tenders, and allowing catcher vessel observers to monitor deliveries on tenders.

The analysis has been scheduled for preliminary review at the June 2014 Council meeting. In the course of preparing the analysis for this meeting, staff has determined that rather than present the document in the form of an incomplete initial review draft, it will be more effective to highlight the topics where the Council could provide policy guidance that will help streamline the analysis. As a result, this document is structured more like a discussion paper. Sections 2 and 3 describe the purpose and need of the action, and the alternatives. Sections 4 and 5 identify issues on which it would be helpful for the Council to provide some guidance during this preliminary review. Section 6 provides some of the preliminary information on tender vessels and vessel safety, which will be included in the complete initial review draft.

2 Purpose and Need

Beginning in 2013, the Council and National Marine Fisheries Service (NMFS) implemented a restructured observer program for the groundfish and halibut fisheries of the North Pacific. The new observer program places all vessels and processors in the groundfish and halibut fisheries off Alaska into one of two categories: (1) a full coverage category, where vessels and processors obtain observers by

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contracting directly with observer providers, and (2) a partial coverage category, where NMFS will have the flexibility to decide when and where to deploy observers based on an annual deployment plan.

A primary purpose of restructuring the observer program was to remove potential sources of bias that could jeopardize the statistical reliability of catch and bycatch data from the groundfish and halibut fisheries. Preliminary information identified that tender activity in the GOA may represent an important source of variance and/or bias in catch data from the partial coverage category. A potential bias in the catch data could occur if vessels are making extended, unobserved deliveries to a tender, and if fishing behavior on observed vessels delivering to tenders is not representative of vessels that are not observed.

A second issue of concern in the partial coverage category is that catcher vessel observers follow different sampling protocols when vessels deliver to a tender, than when vessels deliver to a shoreplant. The Council has specifically placed a high priority on genetic sampling of salmon intercepted in pollock fisheries. When vessels targeting GOA pollock deliver to a tender, as opposed to a shoreplant, the observer does not have the opportunity to census the offload to account for all the salmon that may have been bycaught, and take systematic genetic samples. As pollock deliveries to tenders represent a significant portion of pollock deliveries in some areas of the GOA, this lack may create a bias in the analysis of the genetic stock composition of GOA salmon bycatch.

The Council adopted the following problem statement to originate this action in December 2013:

The Council is concerned that under the new Observer Program, the definition of a fishing trip and the ability of catcher vessels to deliver to tenders, introduces a potential bias that affects data quality, due to observer fishing activity being unrepresentative of unobserved operations. In addition, genetic sampling of Chinook salmon caught as bycatch in the GOA catcher vessel pollock trawl fishery is not occurring when these vessels deliver to tenders, thereby undermining the Council's objective to determine the stock of origin of these Chinook salmon. The Council seeks to correct these unintended consequences by changing how observers monitor and are deployed on groundfish vessels delivering to tenders.

3 Alternatives

NEPA requires that an EA analyze a reasonable range of alternatives consistent with the purpose and need for the proposed action. The alternatives in this chapter were designed to accomplish the stated purpose and need for the action, that tender activity may represent an important source of variance and/or bias in the catch data.

The Council adopted the following alternatives for analysis in December 2013:

Alternative 1: Status Quo

Alternative 2: Revise the Observer Program regulations that affect how observers are deployed on catcher vessels delivering to tenders.

Option 1: Deploy observers for catcher vessels from tenders.

Option 2: Allow catcher vessel observers to monitor deliveries on tenders.

Both options can be selected under Alternative 2.

3.1 Alternative 1, Status Quo

Observer deployment in the trip selection pool

Under the status quo, in the trip selection pool of the partial coverage category, vessels are randomly selected to carry an observer for a particular trip. Vessel owners or operators are required to log each trip in the Observer Declare and Deploy System (ODDS), and they are immediately informed whether the trip has been randomly selected for observer coverage.

The definition of what is a “trip” varies depending on the type of activity a vessel is engaged in. For a catcher vessel delivering to a shoreside processor or stationary floating processor, a trip is defined as the period of time that begins when a catcher vessel departs a port to harvest fish until the offload or transfer of all fish from that vessel. In contrast, for a catcher vessel delivering to a tender vessel, a trip is defined as the period of time that begins when a catcher vessel departs from port to harvest fish until the vessel returns to a port in which a shoreside processor or stationary floating processor with a valid FPP is located (§679.2). This type of trip includes at least one delivery to a tender vessel. The definition of a tender trip allows a vessel to stay at sea, fishing and making multiple deliveries, without ending the trip.

Under the status quo, a vessel is required to log a proposed trip in ODDS at least 72 hours before the departure time, in order to allow the observer provider sufficient opportunity to get the observer to the port for which the trip departure is logged. Vessel operators may log up to three trips in advance. They must provide their best estimate of an end port, even if the trip includes deliveries to a tender, which will be the port to which they will be returning the observer, and which must be a port that has a shoreside processor with a valid FPP.

Tender vessels are not required to have observer coverage, and the regulations governing observer activities do not extend to tender vessels.

Sampling of the delivery by the onboard observer

Currently, when a trawl vessel delivers GOA pollock and incidental salmon prohibited species catch (PSC) to a shoreplant, the onboard observer monitors the offload on the dock. The observer takes a census of salmon PSC in the delivery, and takes genetic samples according to a systematic protocol. Beginning in 2014, the agency has been using a salmon sampling plan that uses the randomization built into the observer selection process for the trip selection pool. Every salmon that is encountered during the randomized observed trips that occur in the GOA pollock fishery is sampled.

When an observed pollock vessel delivers to a tender vessel, the offload is not monitored by the observer. Catch accounting estimates of the number of salmon in the delivery (which accrue against the fishery’s Chinook salmon PSC limit) are based on at-sea composition samples taken by the observer, rather than an offload census. For any salmon that is encountered in the onboard sample, a genetic sample is also collected, as per the agency’s protocol, however there is no opportunity to sample other salmon in the haul.

3.2 Alternative 2, Option 1: Deploy observers to catcher vessels from tenders

Under this option, the definition of a “trip” in the trip selection pool would be changed, so that each delivery constitutes a separate trip, and each trip (delivery) is subject to random selection for observer coverage. In order to facilitate this change, a vessel would be allowed to drop off and/or pick up an observer at the tender vessel, rather than exclusively in port. As a result, the program would need to be able to arrange to deploy observers directly from the tender vessels.

In order to implement this option, regulatory amendments would be required. First, the definition of a tender trip would be rescinded, and a single definition of a fishing trip would be composed so that a trip can begin when a catcher vessel either departs a port to harvest fish, or departs from a tender to go fishing. Second, regulations governing observer activities would need to be extended to tender vessels. These include prohibitions protecting observers at 50 CFR 679.7(g), vessel operator responsibilities at § 679.51(e), and general vessel safety requirements at § 60.746. Under these regulations, tenders would be obligated to provide transportation and housing for an observer if requested, and to provide safe conditions, access, notification, communication equipment, and assistance, including with transfer of observers at sea.

This option would also require modifications to ODDS, to allow vessel operators to notify the observer provider that they are intending to initiate or end their trip at a tender vessel. Implementation of this amendment would likely also require a modification to the contract of the observer provider for the partial coverage fleet.

3.3 Alternative 2, Option 2: Sample catcher vessel offloads on tenders

Option 2 proposes to allow a catcher vessel observer to conduct the same monitoring activities when a vessel delivers to a tender as when a vessel delivers to a shoreplant. The GOA pollock trawl fishery is currently the only fishery where there is a difference in the observer’s monitoring practice depending on the platform to which the catch is being delivered. Under this option, the catcher vessel observer would transfer to the tender vessel during the delivery, and monitor the offload from onboard the tender vessel.

As with Option 1 above, regulatory amendments are required to implement this option. In order for an observer to be able to be stationed onboard the tender vessel for monitoring, the regulations protecting observers, defining vessel operator responsibilities, and describing general vessel safety requirements would need to be extended to tender vessels. There may also be a need to develop performance-based standards for tenders, for example requiring each vessel to identify a safe sampling location for the observer.

3.4 Comparison of alternatives

Table 1 Summary of Alternative 2 options

	Alternative 2, Option 1 Deploy observers to catcher vessels from tenders	Alternative 2, Option 2 Sample catcher vessel offload on tenders
Addresses purpose		
Remove bias from random observer deployment	Yes	No
Remove bias from salmon sampling	No	Yes
Regulatory changes required		
Apply observer responsibilities to tender vessels (NMFS, MSA regs)	Yes	Yes
Change definition of a trip so that each delivery constitutes a separate trip	Yes	No

4 Council considerations regarding the purpose and need

4.1 Based on the 2014 Annual Report, is there still a data quality issue?

The June 2013 Annual Performance Review, a preliminary evaluation of observer coverage in the partial coverage category during the first sixteen weeks of 2013, included data on catcher vessels delivering to tenders, and indicated that there may be incentive for vessels in the trip selection pool to fish more, and make more deliveries to a tender, when unobserved. The review identified that observed trips for catcher vessels delivering to tenders were typically shorter than unobserved trips for catcher vessels delivering to tenders, noting that data was limited to evaluate whether this trend is statistically important. During the time period evaluated, few (16) trips with tender deliveries were observed; by comparison, 136 trips with tender deliveries were unobserved.

The Council's 2014 Annual Report evaluates a full year of fishing under the restructured program, and also examines the question of whether the data indicates a potential for bias. Analysis of trip length for vessels in the trip selection pool delivering to tenders did not show a systematic difference in trip length between observed and unobserved vessels (see Section 3.3.3 and Figure 3-14 in the 2013 Annual Report). The distribution of trip length was similar for both observed and unobserved trips, with a few longer trips occurring in both categories. The differences in trip length for the full year of 2013 were less pronounced than the differences noted in the June 2013 preliminary report for the first 16 weeks of 2013. However, the small number of observed trips in 2013 for vessels delivering to tenders may be insufficient to clearly capture any differences in trip length. In addition, NMFS continues to receive anecdotal information that vessel operators are taking longer trips when delivering to tenders to avoid ending a fishing trip, thereby delaying becoming subject to selection for observer coverage. Therefore, NMFS recommends that continued development of alternatives to deploy observers from or on tenders be considered in the context of other actions and priorities for Council and NMFS analysis.

4.2 If so, is it for tender activity in all fisheries, or just some?

The 2013 Annual Report does not break down observed versus unobserved tender trips by fishery or area, however the following provides some general information. It is difficult to evaluate data on tender activity, because although there is a field on a fish ticket to identify whether the transaction involves a delivery to a tender, there has been inconsistent reporting associated with this field. NMFS is engaged in trying to improve the timeliness of data transmitted on tender deliveries by asking tender vessels to use an electronic reporting mechanism known as tLandings. As a result, the data cited below, which is from the catch accounting system, may be underreporting tender activity.

The fisheries where tender vessels used are the GOA pollock fishery, and the GOA and BSAI Pacific cod fisheries. Table 2 shows the amount of catch delivered to tenders, by area and target fishery. For the Pacific cod target fishery, Table 3 evaluates catch by gear type. The majority of tendering occurs in the Pacific cod pot fisheries, followed by the pollock and Pacific cod trawl fisheries in the western GOA and sometimes NMFS management area 620. Some of the hook and line Pacific cod pot fishery is delivered to tenders, as well as a small amount of jig catch. According to the available data, there is no tendering in Southeast Alaska, and a negligible amount of pollock tendering in the eastern GOA.

Table 3 and Table 4 evaluate tendered catch as a proportion of total catch in that target fishery, by gear type. For pot vessels fishing for Pacific cod, a very high proportion of the target catch (78% in 2012, 94% in 2013) is delivered to tenders. For trawl vessels, the proportion varies from 8% to 38%, although it is higher in the western GOA (51% in 2012 for pollock). 17 percent of the total hook and line Pacific cod is delivered to a tender.

Table 2 Catch delivered to tenders (mt), by area and target fishery

Species	Year	610	620	630	BS	AI	Total
Pacific cod	2011	7,938	5,856	4,761	3,035	*	21,884
	2012	8,073	6,004	6,592	1,902	*	23,850
	2013	10,605	8,157	3,137	*	*	26,109
Pollock	2011	6,233	28	1			6,262
	2012	13,013	2,238	15			15,266
	2013	3,904	4,040	3			7,950

Table 3 Pacific cod catch delivered to tenders (mt), as a proportion of total Pacific cod catch, by gear type

Year	Trawl			Pot			Hook and Line			Jig		
	Tendered catch	Total catch	%	Tendered catch	Total catch	%	Tendered catch	Total catch	%	Tendered catch	Total catch	%
2012	3,761	19,385	19%	16,501	21,222	78%	2,381	14,024	17%	1,207	723	167%
2013	8,105	21,181	38%	15,916	16,859	94%	2,098	12,012	17%	49	475	10%

Table 4 Pollock trawl catch delivered to tenders (mt), as a proportion of total pollock catch, in the western and central GOA

Year	Western and Central GOA (610, 620, 630)			Western GOA (610) only		
	Tendered catch	Total catch	%	Tendered catch	Total catch	%
2011	6,262	77,521	8%	6,233	20,594	30%
2012	15,266	98,975	15%	13,013	27,893	47%
2013	7,950	90,727	9%	3,904	7,711	51%

4.3 Are there any other Council actions that might address this concern?

The Council has included a proposal under the Gulf of Alaska trawl bycatch management program to require 100 percent observer coverage on all vessels using trawl gear. Full coverage would remove the need to improve the deployment model for trawl vessels delivering to tenders; as all vessels would be required to have an observer onboard, there would be no issue with respect to unrepresentative observed behavior. The GOA bycatch management program only applies to trawl vessels, so it would not alleviate any potential deployment bias in the Pacific cod pot sector, which constitutes the majority of tender activity. At the same time, there are relevant factors that distinguish the pot and trawl sectors relative to prioritizing observer coverage. The Pacific cod pot sector harvests comparatively little incidental catch, as is reported in the 2013 Annual Report in Table 4-3 on page 81. The Pacific cod trawl fishery has a more varied catch composition, and even though the pollock trawl fishery also has low incidental catch, the fishery is known to intercept salmon, a species of management concern.

Full observer coverage in the trawl Pacific cod and pollock fisheries also has the potential to address concerns with respect to accurate accounting and sampling of salmon caught as bycatch on GOA pollock vessels delivering to a tender. Although the catcher vessel observer would still not be able to monitor the delivery at the tender to census for salmon, because all pollock catch would be observed, the agency could consider dockside sampling of the tender vessel delivering pollock catch, to census and sample salmon. Dockside sampling in the pollock fishery was employed unsuccessfully under the 2013 Annual Deployment Plan, but one of the problems was that observed and unobserved catch were mixed in the tender vessel hold. With full coverage, all of the tender vessels' pollock catch would be from observed vessels, and dockside sampling could be considered for salmon accounting. If this were to be the case, the

100 percent observer coverage under GOA trawl bycatch management program would need to reflect that it was also intended to include 100 percent sampling of pollock deliveries at the plant, similar to the regulations in the Bering Sea pollock fishery.

Given that the safety, logistical, and administrative aspects of deploying observers from or on tenders are complex, and will take staff time and resources to develop, the Council may want to consider how the tender amendment package interrelates with development of the GOA trawl bycatch package, in terms of priority.

5 Council considerations regarding the alternatives

As staff worked through the operating model of how deployment from a tender vessel would work under Option 1, some alternatives were identified that involve a policy decision as to how the option will be implemented. To the extent that any of these decision points can be clarified early in the process, it will streamline the analysis of this option when it comes back before the Council for initial review.

5.1 Who should bear the burden of ensuring the observer gets to the vessel?

One discussion point about the implementation of Option 1 has been who should bear the onus of ensuring that an observer gets onboard the vessel: the observer provider or the catcher vessel. Under the current trip selection model, once a trip has been selected for coverage, it is the responsibility of the observer provider to ensure that an observer is available in port to depart on that trip within 72 hours. If the observer provider cannot make an observer available within that time period, NMFS will release the trip from the observer coverage requirement.

Under Option 1, trips may begin and end at a tender vessel operating on the fishing grounds. Tender vessels may be operating as much as twenty hours away from port, and the added logistical complexity of getting the observer out to the tender at sea may not be possible within a 72-hour timeframe without pre-stationing observers in the area. The observer provider will not be able to control the timing of tender departures out to the fishing grounds. If the onus remains on the observer provider to continue to have an observer available within this timeframe, even if the observer needs to be available to deploy from a tender vessel, it is likely that this will increase costs under the partial coverage program. Indications are that this type of major change to the deployment model would require a modification to the partial coverage contract, and a change in either the transportation costs, the cost per day, or both.

By changing the onus for obtaining an observer from the provider to the catcher vessel, some of the costs to the program are likely to be mitigated. Under this operating model, NMFS and the observer provider would still commit to deploying observers from tender vessels to the extent possible. The difference would be that it would be the vessel's responsibility to get an observer onboard, if a trip was selected for coverage. Ultimately, if NMFS is unable to get an observer to the tender, then the vessel would be responsible for coming to port to pick up the observer.

This scenario (requiring the catcher vessel to pick up an observer in port, even when tendering) was NMFS' original requirement in the proposed rule for the restructured observer program. In response to public comment on the proposed rule (see Comment 40 in 77 FR 70062), however, NMFS created the specific definition of a trip for vessels delivering to a tender vessel. Public comment cited specifically that the final rule should provide a method for Western GOA catcher vessels to obtain observer coverage without having to transit back to Sand Point or King Cove. In the final rule, NMFS agreed that requiring these vessels to return to port would significantly impact the vessels' operations. By placing the ultimate responsibility on the catcher vessel to ensure that an observer is onboard when called for, NMFS would

be reversing this accommodation. The Council will need to balance this against the alternative of higher costs to the program, however, and take into account the mitigation that through this amendment NMFS is putting in place conditions that will allow observers to be deployed from tenders in many if not all cases.

6 Other relevant information

6.1 What is a tender vessel

A tender vessel is defined in regulation as a vessel that is used to transport unprocessed fish or shellfish received from another vessel to an associated processor (50 C.F.R. 679.2). In order to operate in Federal waters of the GOA or BSAI, a tender vessel must have a Federal fisheries permit (§ 679.4(b)). A single tender vessel can receive deliveries from multiple fishing vessels, depending on its capacity, and the regulations that limit tender activity. The use of tenders allows fishing vessels to keep fishing, without the delay and associated costs associated with travel to and from port. Throughout the course of a year, catcher vessels may deliver to tenders, shoreside processors, or even both during a single trip (split delivery), and the vessels that engage in these activities change from year to year.

In 2014, 166 vessels have an FFP with a tender endorsement, with vessels ranging in size from 30' to 185' LOA. 18 of these are endorsed exclusively as tender vessels. In 2013, the catch accounting system reports deliveries to 44 different tender vessels, ranging from 71' to 180' LOA. As noted above, the catch accounting system may underreport tender vessel activity, as although there is a field that identifies whether a delivery is occurring to a tender, there has been inconsistent reporting of this field, especially in the past.

To work as a tender, a vessel must be associated with a shoreside processor. The tender vessel issues a preliminary fish ticket to the delivering catcher vessel, estimating the weight of total catch, and this fish ticket is then completed at the plant when the tender offloads, and submitted to NMFS by the plant. The catch composition for the entire tender offload is determined at the plant, and retroactively assigned to each of the individual deliveries based on proportional contribution to the total weight of the catch. The processor must enter the fish ticket information into eLandings² within 7 days of the initial delivery. NMFS and the Alaska Department of Fish and Game (ADFG) are also implementing a tender component to eLandings, called tLandings, which enables electronic data entry on board tender vessels without an internet connection. The application and landings reports (fish tickets) are stored on a portable thumb drive, and tender operators can create and print fish tickets similar to the current method used shoreside.

While some tender vessels are directly owned by the processor, many others are independent operators working under a contract with a processor. A few tender vessels operate as such year-round, but many others participate both as a catcher vessel and as a tender vessel during different times of the year, for example participating in the directed crab fishery and then tendering for groundfish. Vessels are prohibited from acting as a tender until all fish that has been harvested by the vessel has been offloaded, however.

Tender vessels will anchor in sheltered areas within State waters, in wind-sheltered bays or close to shore. The delivering catcher vessel will tie up to the tender while the catch is pumped onboard. Fish is pumped through a dewatering box and weigh box. Anecdotally, the transfer of personnel between the vessels is commonplace as they are tied up together. The vessel captain comes across to the tender to sign the fish ticket; some tender vessels may also provide support services to catcher vessels which have been on the grounds for a longer time period.

² eLandings is the Interagency Electronic Reporting System for reporting commercial fishery landings in Alaska.

6.2 Observer safety considerations

The safety of all persons is the highest priority for NMFS, but the safety of observers deployed in compliance with Federal regulations is particularly important. Observers are instructed that safety is their first priority above all sampling and data recording duties. NMFS puts observer safety first, takes any safety issue very seriously, and attempts to mitigate safety concerns in the observer work environment where possible. A key challenge for NMFS in developing recommendations about deployment of observers from or on tenders are the trade-offs between the potential to improve data quality and the safety concerns that may arise under the proposed alternatives.

NMFS-certified observers have not been required on tender vessels in the Alaska Region. Therefore, alternatives that would require that observers be deployed from tenders to fishing vessels or deployed on tenders to monitor deliveries would expand existing observer coverage requirements to a new type of vessel operation. Current regulations at § 679.51(e)(1) contain responsibilities for vessels required to carry observers. These responsibilities include requirements related to safety (discussed in more detail below); provision of accommodations and food; transmission of data; access to equipment, records, and areas of the vessel; prior notification of certain vessel activities; assistance from the crew in certain activities; other operational requirements; and inspection requirements. All of these requirements or some variation appropriate for a tender operation would need to be extended to tenders under Alternative 2.

The safety requirements are divided between regulations governing safe conditions on the vessel and safe transfer at sea. The safe conditions requirements include the adherence to all U.S. Coast Guard (USCG) laws and any other applicable rules, regulations, or statutes pertaining to safe operations. In addition, a valid Commercial Fishing Vessel Safety Decal issued by the USCG within the past 2 years is required.

The safe transfer at sea regulations require that transfers occur during daylight hours, under safe conditions, and with the agreement of the observers involved. The vessel operator must notify observers at least 3 hours before they are transferred so that they can collect personal belongings, equipment, and scientific samples. Additionally, the vessel must provide a safe pilot ladder, conduct the transfer to ensure the safety of the observers, and provide an experienced crew member to assist the observers in the small boat or raft in which any transfer is made. All of these safety requirements or some variation appropriate for a tender operation also would need to be extended to tenders under Alternative 2.

Tender operations, platforms, and practices are not yet well understood by NMFS and additional information about logistical and operational details will need to be gathered if analysis of alternatives to deploy observers from or on tenders moves forward. However, given those caveats, NMFS has made some assumptions about how observer deployment might occur on these vessels and the safety concerns that may be involved with using tenders to transfer observers to catcher vessels or having observers deployed aboard tenders.

Depending on the deployment scenario, one observer or several observers would board a tender vessel in a given port and be transported to a location where they would be available to board a catcher vessel that is selected for observer coverage. When the selected catcher vessel delivers to the tender, the observer would board the catcher vessel while the catcher vessel was in the process of delivering catch or immediately before or after the transfer of catch occurred. If more than one observer was on board the tender, the same process would be repeated with any other catcher vessel selected for observer coverage. When the catcher vessel has completed the trip selected for observer coverage they would either drop the observer off at the tender when it transfers fish or drops the observer off at a port if it delivers its fish to a shoreside processor.

If a catcher vessel has an observer aboard and delivers to a tender, that observer would disembark the vessel onto the tender. Depending on how many catcher vessels delivering to the tender have observers on board, there may be more than one observer that disembarks on the tender. When the tender vessel returns to the shoreside processing facility the observer would disembark.

If Option 2 is selected, an observer from a catcher vessel delivering to a tender would transfer from the catcher vessel to the tender to monitor the flow of fish to conduct an offload census of the salmon. Once the transfer of fish was complete, the observer would either remain aboard the tender to return to port for another assignment or transfer back aboard the catcher vessel for either another trip.

A number of issues related to observer safety must be considered to deploy observers from or on tender vessels.

Safety Decal

It is not known if all tender vessels already obtain the USCG safety decal or could meet the requirements for the decal. However, many of the USCG requirements for the safety decal are dependent on crew size. These include but are not limited to raft capacity, first-aid requirements, and posting emergency instructions. The addition of an observer to the vessel may alter the vessel's requirements to maintain safe conditions. Should these discrepancies be identified when an observer boards the vessel at-sea, there would be few, if any, options for the vessel to resolve the issue.

Observers are required to verify that a vessel meets USCG requirements when they first board the vessel at the dock to ensure all the required safety equipment is still aboard the vessel. If the observer finds that the vessel does not comply with the USCG requirements, the observer is instructed to disembark the vessel and contact NMFS and their observer provider. Observers would be required to make the same assessment before boarding a tender in a port or before embarking from a tender onto a catcher vessel selected for observer coverage. The decision to not embark on a trip with a catcher vessel delivering to a tender may be a bit more complicated than making this decision on land because the observer must ensure that he or she has the option of returning to the tender vessel if needed. NMFS may need to recommend additional regulations to address this scenario.

At-sea transfers

Currently, at-sea transfers by observers are relatively rare and usually occur aboard larger catcher/processors that employ skiffs to complete the transfer. However, deployment of observers from tenders will, by definition, involve at-sea transfers of observers every time an observer moves from a tender to a catcher vessel selected for observer coverage or back to the tender upon completion of the observed trip. Transfers at sea place the observer at risk and must be done very carefully. NMFS's primary concern with current regulations is that there is a good deal of subjectivity in the requirements for "agreement of the observers involved" and for transfers to occur under "safe conditions." As this analysis develops and NMFS learns more about the specifics of various tender operations and when, where, and how fish and people are transferred between catcher vessels and tenders, we will seek input from industry, the Coast Guard, and observers about regulatory amendments or clarifications that would reduce the subjectivity of these requirements for the benefit of both the observers and vessel operators.

Safe pilot ladder

Current regulations also require a safe pilot ladder be provided to the observer. However, the use of a pilot ladder to board a vessel at sea currently is rare. Most transfers at sea occur aboard catcher/processors or motherships that use a skiff and crane to bring the observer on board. Deploying observers from or on tenders likely will increase the use of pilot ladders to transfer observers between

vessels. The USCG has additional guidance about safe ladders that NMFS will explore further as a possible addition to current regulations. The use of pilot ladders to transfer observers to and from a tender will likely result in a need for increased physical standards of the observers. Currently, observer eligibility has minimum physical requirements that observers are tested for during their training. If observers must use pilot ladders, observer training would likely also require that observers be tested on their ability to use such a ladder. This could result in fewer observers able to meet the physical standards and pass the required training.

OLE protection for observers

NMFS Office of Law Enforcement (OLE) is concerned about its very limited authority over observers while they are deployed in the field and before they are assigned to a vessel required to carry an observer. Currently, observers are occasionally transported on fishing vessels. For example, an observer may not be assigned to the vessel but the vessel is willing to transport the observer from one port to another when other modes of transportation, such as planes or taxis, are unavailable. In this scenario, OLE authority (or lack there-of) to protect the observer is similar to while they are being transported by airplane or automobile. If observers are to be transported on tender vessels in the future, OLE would require that all or most of the vessel responsibility regulations apply to tender vessels while housing, transporting, or otherwise carrying an observer or observers. In addition, NMFS may require observers being transported on tenders to record the vessel position at noon each day, which would require an observer access to the wheelhouse, vessels logs, and GPS equipment.

Sampling on board a tender

Additional safety concerns may exist for observers sampling on a tender under Option 2. Tender operators would be required to provide the observer with safe areas to conduct their work. Given the likelihood that tender vessels and their operations differ greatly from each other, a performance based standard could be developed requiring each vessel to identify a safe sampling location for the observer to complete their duties that was protected from overhead and other mechanical hazards.

As stated earlier in this section, as NMFS learns more details about the range and scope of tender vessel characteristics and operations, additional regulatory amendments or procedures may be recommended to address safety and accommodations for observers deployed from or on tenders.