

EXCERPT from the
Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for
Amendment 86 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian
Islands and Amendment 76 to the Fishery Management Plan for Groundfish of the Gulf of
Alaska
“Observer Program Restructuring”
March 2011

Problem statement (Section 2.3 of the analysis, page 13)

The proposed action in this amendment package is intended to address a variety of longstanding issues, as described above, associated with the existing system of observer procurement and deployment. The problem statement for this action, last revised in December 2008, is as follows:

The North Pacific Groundfish Observer Program (Observer Program) is widely recognized as a successful and essential program for management of the North Pacific groundfish fisheries. However, the Observer Program faces a number of longstanding problems that result primarily from its current structure. The existing program design is driven by coverage levels based on vessel size that, for the most part, have been established in regulation since 1990 and do not include observer requirements for either the <60' groundfish sector or the commercial halibut sector. The quality and utility of observer data suffer because coverage levels and deployment patterns cannot be effectively tailored to respond to current and future management needs and circumstances of individual fisheries. In addition, the existing program does not allow fishery managers to control when and where observers are deployed. This results in potential sources of bias that could jeopardize the statistical reliability of catch and bycatch data. The current program is also one in which many smaller vessels face observer costs that are disproportionately high relative to their gross earnings. Furthermore, the complicated and rigid coverage rules have led to observer availability and coverage compliance problems. The current funding mechanism and program structure do not provide the flexibility to solve many of these problems, nor do they allow the program to effectively respond to evolving and dynamic fisheries management objectives.

Purpose and need for action (Section 2.2 of the analysis, pages 9-13)

The North Pacific Groundfish Observer Program is the largest observer program in the United States and plays a critical role in the conservation and management of groundfish, other living marine resources, and their habitat. Data collected by the observer program are used for a wide variety of purposes including: (1) stock assessment; (2) monitoring groundfish quotas; (3) monitoring the bycatch of groundfish and non-groundfish species; (4) assessing the effects of the groundfish fishery on other living marine resources and their habitat; and (5) assessing methods intended to improve the conservation and management of groundfish and other living marine resources.

The mission of the observer program is to provide the highest quality data to promote stewardship of the North Pacific living marine resources for the benefit of the Nation. The goal of the observer program is to provide information essential for the management of sustainable fisheries, associated protected resources, and marine habitat in the North Pacific. This goal is supported by objectives that include:

1. Provide accurate and precise catch, bycatch, and biological information for conservation and management of groundfish resources and the protection of marine mammals, seabirds, and protected species.

2. Provide information to monitor and promote compliance with NOAA regulations and other applicable programs.
3. Support NMFS' and the Council's policy development and decision making.
4. Foster and maintain effective communications between managers, scientists, and participants in the fisheries.
5. Conduct research to support the mission of the North Pacific Groundfish Observer Program.

The observer program has an integral role in the management of North Pacific fisheries. Information collected by observers is used by managers, scientists, enforcement agents, and other agencies in supporting their own missions. Observers provide catch information for quota monitoring and management of groundfish and prohibited species, biological data and samples for use in stock assessment analyses, information to document and reduce fishery interactions with protected resources, and information and samples used in marine ecosystem research. The observer program provides information, analyses, and support in the development of proposed policy and management measures. Further, observers interact with the fishing industry on a daily basis and the observer program strives to promote constructive communication between the agency and interested parties. Observations are used by managers and enforcement personnel to document the effectiveness of the management programs of various entities, including NMFS, the U.S. Coast Guard, and the U.S. Fish and Wildlife Service. In order to provide these services, the observer program Office routinely conducts research projects and analyses designed to assess the efficacy of management programs.

Though recognized as a successful and essential program for management of the North Pacific groundfish fisheries, a number of longstanding problems stem from the current structure of the observer program. Problems and concerns with the observer program, cited in previous restructuring analyses, remain unresolved and are not likely to be resolved without fundamental changes to the observer service delivery model. Primary concerns with the existing structure center around the disproportionate percentage of revenue paid by some sectors to fulfill observer coverage requirements, the inability of NMFS to determine when and where observers will be deployed in sectors with less than 100% coverage requirements, the inability to effectively tailor coverage levels and deployment patterns to address emergent management needs, and the lack of data from vessels not subject to observer coverage under the existing requirements.

Coverage Based on Vessel Size – Cost Disparity and Lack of Data

The current groundfish observer program throughout Alaska is one in which groundfish vessels less than 60' are not required to carry observers and vessels 60' to 125' LOA are required to carry and pay for their own observers 30% of their fishing days, regardless of gear type or target fishery.¹ These two size categories make up the majority of vessels fishing in the GOA and out of ports other than Dutch Harbor and Akutan in the BSAI. Observers deployed on vessels greater than 60' estimate total catch for a portion of the hauls or sets, and sample these hauls or sets for species composition. These data are extrapolated to make estimates of total catch by species for the entire fishery, including unobserved vessels. Observer data from observed vessels are assumed to be representative of the activity of all vessels, and are used to estimate total catch of prohibited species for the entire fishery.² On average, vessels less than 60' harvested 27% of the total GOA groundfish catch from 2003 through 2007. All of this catch was unobserved, in part because of concerns with the cost of observer coverage and the practical and logistical difficulties associated with placing observers on smaller vessels.

¹ Unless participating in a limited access quota program as described previously, which may require additional coverage.

² This has resulted in additional data problems owing to fishing behavior by some boat operators, when an observer is aboard, that is clearly not representative of fishing practices when unobserved. Referred to as "fishing for observer coverage", these resulting data, when extrapolated to other vessels that are unobserved, compound the potential catch and bycatch estimation errors, but to an unknown degree.

Many vessels between 60' and 125' LOA operating in the GOA pay a disproportionate percentage of their revenues towards observer costs, relative to both their under 60' counterparts and the larger offshore vessels operating in the BSAI. Not only do these vessels have far lower revenues on a per-vessel basis than do the large offshore vessels in the BSAI, the daily costs of coverage are often higher for vessels operating in the GOA, due to the logistics of deploying observers to remote ports for short periods of time. For example, the fewer the number of participants in a particular fishery, the more difficult it is for observer providers to develop cost-effective methods of rotating observers between vessels. Observer transportation costs also increase greatly in remote ports or rural locations that require chartered air service.

Vessels greater than 60' LOA also pay a disproportionate percentage of their revenues towards observer costs, relative to their counterparts outside of Alaska. The North Pacific Groundfish and the Northwest Pacific Hake Observer Program are the only programs in the U.S. in which the fishing industry pays for their own observer coverage to meet coverage requirements established in Federal regulations. Observer programs operating in other regions of the U.S. are federally funded. This means that fishermen operating in the North Pacific pay a much higher percentage of their revenues for observer coverage than do similarly-situated fishermen outside of Alaska. In addition, Alaska's coastal communities are, in general, far less economically diversified, have fewer economic opportunities, and are more dependent on commercial fishing than most fishing communities outside of Alaska.

Halibut Fisheries

In addition to the lack of observer coverage in the less than 60' fleet, there is no observer coverage in the halibut fisheries. Halibut fisheries are only observed incidentally to groundfish operations. There are a number of potential bycatch issues pertaining to the halibut fleet, of concern to managers, that could be addressed with some level of observer coverage. Most of the information gathered for management of halibut vessels (and vessels <60') currently takes place at shoreside processors, which may provide adequate retained catch accounting for target species and incidental catch species. However, discards are self-reported for all vessels in these sectors. NMFS does not currently have a verifiable measure to account for these discards, nor does it have a method for assessing the accuracy of its management decisions. Additionally, current self-reporting requirements do not include information about vessel fishing behavior.

In addition, in 1998, the U.S. Fish and Wildlife Service (USFWS) prepared a Biological Opinion (BiOp) on the commercial Pacific halibut hook-and-line fishery in the GOA and BSAI, and its effects on the short-tailed albatross (*Phoebastria albatrus*) (USFWS 1998). The USFWS concluded:

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of short-tailed albatrosses which will result from this action.

- 1) The research plan required by the reasonable and prudent measures of the June 12, 1996 biological opinion on the BSAI/GOA groundfish fishery will apply also to this fishery, and will be implemented.*
- 2) Initial indications are that a given halibut vessel is far more likely to encounter a short-tailed albatross during a given unit of fishing effort than is a BSAI/GOA groundfish fishing vessel. Data supporting or refuting this supposition do not exist. **The NMFS shall prepare and implement a plan to investigate all options for monitoring the Pacific halibut fishery in waters off Alaska. It will then institute changes to the fishery appropriate to the results of this investigation (emphasis added).***

3) *The NMFS has done an admirable job in making commercial fishers aware of the plight of endangered birds and marine mammals. They shall continue to educate commercial fishers about seabird avoidance measures, short-tailed albatross identification, the importance of not taking short-tailed albatrosses, and ways to avoid taking them when they are sighted near bait.*

In order to be exempt from the prohibitions of section 9 of the Act, the NMFS must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

Terms and conditions must include reporting and monitoring requirements that assure adequate action agency oversight of any incidental take [50 CFR §402.14(I)((1)(iii) and (I)(3)]. The monitoring must be sufficient to determine if the amount or extent of take is approached or exceeded, and the reporting must assure that the USFWS will know when that happens. The NMFS must provide for monitoring the actual number of short-tailed albatrosses taken, and assure that the reasonable and prudent measures are reducing the effect of the fishery to the extent anticipated. If the anticipated level of incidental take is exceeded, the action agency must immediately stop the action causing the take and reinitiate formal consultation.

Under these terms and conditions, the NMFS must:

1) *Apply the groundfish fishery seabird avoidance evaluation research plan (required by the reasonable and prudent measures of the June 12, 1996 biological opinion on the BSAI/GOA groundfish fishery) to this fishery, with changes appropriate to reflect differences in the timing and methodologies between the two fisheries.*

2) *Implement the above seabird avoidance evaluation research plan. Implementation of this plan shall begin no later than 1999. The seabird avoidance evaluation shall be comprised of experiments to test the effectiveness of seabird deterrent devices and methods, and shall use observers to monitor the effectiveness of deterrent devices and methods used by the vessels participating in the evaluation. The NMFS will report to the USFWS on the parts of the plan that have been implemented concurrent with their implementation. A final report of this seabird avoidance device and methods evaluation will be made to the USFWS by December 31, 2000.*

3) *The NMFS will institute changes to the Pacific halibut fishery in waters off Alaska deemed appropriate based upon the evaluation of the seabird deterrent devices and methods. **Changes may range from requiring minimal observation of the fishery due to the effectiveness of the deterrent devices to requiring extensive observer coverage and expanded or modified use of seabird deterrent devices and methods** (emphasis added).*

Vessel Selection

Currently, owners and operators of plants and vessels with a 30% observer requirement determine when to carry observers, to meet their mandatory coverage levels. These deliberate choices may result in biased information on the composition and temporal and spatial distribution of catch. In addition, substantial data gaps may occur in certain fisheries or areas. For fishery management purposes, NMFS needs to have a rational, scientifically-based vessel selection plan, which the fleet does not control. Under the current structure, NMFS has no means by which to assign observers to vessels and plants with 30% observer coverage requirements. For example, many 30% vessels take observers at the beginning of the fishery, to ensure they meet their coverage requirements before the fishery closes (at a future uncertain date). This may result in a relatively substantial amount of observer data available at the beginning of the fishery, tapering off toward the end of the fishery. A relatively small amount of observer data at the end of the

fishery can greatly influence both the total catch and PSC estimates, which in turn influences fishery closures. This problem has been acknowledged by NMFS, the Council, and industry for many years, but has not changed.

In a March 2004 report, the U.S. Department of Commerce, Office of Inspector General (OIG) recommended that NMFS work with the Council to establish requirements for an observer program that includes a vessel selection process that is scientifically valid and unbiased. NOAA concurred that improvements in vessel selection procedures are needed for scientific data collection, and indicated that it was working with the Council to address these biases. A follow-up memorandum from the OIG to NMFS' Assistant Administrator in September 2008, documented that the OIG recommendation for this issue remains open, as fishery managers still cannot control when and where observers are placed in the North Pacific groundfish fisheries. All other recommendations in the 2004 OIG report for improving data quality, performance monitoring, and outreach efforts in NMFS observer programs have been addressed with this one exception. This is an important data quality issue that is raising public questions about the existing observer deployment system in less than 100 percent observed fisheries.

In addition, note that the Programmatic Supplemental Environmental Impact Statement (EIS) prepared for the groundfish fisheries off Alaska emphasized the importance of data collection in the management of the groundfish resources off Alaska. The preferred alternative identified improved data quality and management that would accrue under a restructured observer program with a new service delivery model (NMFS 2004c).

Observer Skill and Sampling Complexity

Work requirements for observers vary according to vessel, gear type, and target fishery. For example, monitoring and sampling onboard a pollock catcher vessel is technically straightforward, whereas sampling on some of the small "head and gut" factory trawlers can be challenging. Observer skill levels differ, and depend on experience and other factors. Observer effectiveness and efficiency, and overall data quality would be best served under a system which allows NMFS to develop observer skills progressively; first deploying observers in less challenging situations, or at locations where they can be mentored by experienced observers or NMFS staff. As observers become more experienced and skilled, they could then be deployed in more complex and challenging sampling environments and could, in turn, mentor newly-trained observers. It is not possible to implement this approach under the current service delivery model except through broad regulatory requirements for level 2 and lead level 2 observers. This approach can best be fully implemented under a restructured program that provides the flexibility necessary to properly match deployment complexity with observer skill level in all observed fisheries, and to implement a mechanism to develop observer skills consistent with the overall requirements for observers.