

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director



ESTIMATED TIME
2 HOURS

DATE: April 4, 2000

SUBJECT: Observer Program

ACTION REQUIRED

- (a) Receive Observer Committee report.
- (b) Initial review of regulatory amendment package.
- (c) Receive report on EFP for observer sampling methods.

BACKGROUND

(a) Committee report

Your Observer Committee met in Seattle on March 20-21 to discuss near-term program issues, including CDQ observer qualifications and observer shortages, and longer-term, programmatic issues. Their report is under Item C-2(a) and will be summarized by staff and Committee Chair Joe Kyle.

(b) Regulatory amendment package

NMFS staff has developed an analysis for initial review at this meeting which contains several proposed changes to the current program, which could be implemented in time for the 2001 fishing season. These changes resulted from previous Observer Advisory Committee and Council requests. NMFS staff will review the issues, the alternatives being considered, and the analysis of alternatives at this time. It is anticipated that the Observer Committee will review the analysis further, and provide recommendations on alternatives, prior to the Council's June meeting where final action is scheduled.

(c) EFP on observer sampling methods

The Groundfish Forum and NMFS collaborated in research to examine species composition and length frequency sampling methods used by at-sea observers in trawl fisheries. This research was conducted under an experimental fishing permit (EFP) approved by the Council and NMFS in June 1999. Fieldwork was completed in the Bering Sea on the F/T American No 1 in September 1999. John Gauvin and John Henderschedt of Groundfish Forum coordinated the fieldwork with assistance from Craig Rose and Sarah Gaichas (NMFS). The experimental design called for removing six 100 kg subsamples from each of 60

commercial sized (10-12 mt) trawl catches, as well as accounting for all production and discards by species group for each haul. The length frequency sampling portion of the experiment required deck sorting of halibut to minimize mortality as well as collecting 120 length samples at specified intervals throughout each haul. The report summarizes analyses estimating the extent of stratification by species, the precision of species total catch estimates at the haul, day, week, and cruise level, and the accuracy of estimated total catch weight and numbers for selected prohibited and non-target species. In addition, sample estimates of total catch were compared with production estimates of total catch for target species. Item C-2(Supplemental) is a more detailed write-up of the results which will be presented to the Council.

OBSERVER COMMITTEE

Report to the Council
March 27, 2000

The Council's Observer Committee met on March 20-21 in Seattle, WA with the following persons in attendance:

Committee Members: Joe Kyle (Chair), Chris Blackburn, Susan Robinson, Kim Dietrich, John Gauvin, Bob Mikol, Paula Cullenberg, Mandy Merklein, Kathy Robinson, John Iani, (Paul MacGregor attended for Trevor McCabe).

Agency staff: Chris Oliver (NPFMC), Sue Salvesson, Bridgette Mansfield, Sally Bibb (NMFS Region), Dan Ito, Martin Loefflad, Shannon Fitzgerald, Heather Weikart, Ericka Acuna, Bill Karp (NMFS AFSC), Vicki Cornish, Steve Copps (NMFS HQ), Gregg Williams (IPHC).

Other: Bob Alverson, Harold Holten and Duke Bryan (AFU), Jim Greiner, Bryan Belay, Jas Mangat, Cassie Owens, Michael Lake, Fran Bennis, Steve Hughes, Dave Edick

The Committee discussed near-term issues (including regulatory changes and observer availability) as well as long-term programmatic issues. The Committee used the Council's motion from the October 1999 meeting as a reference point for its discussions (attachment 1). A summary of the Committee's discussions and associated recommendations, by topic, follows:

Overview of Issues

Chairman Kyle, Sue Salvesson, and Dan Ito provided some opening remarks to review the Committee's charge, in the context of the primary issues facing the program. Each Committee member, as well as persons in attendance, was given an opportunity to speak briefly regarding their major issues of concern with the program. In summary, the recurring themes echoed by these comments included: (1) need for flexibility in placing observers where we can get the most efficient use for science and catch accounting; (2) need to clearly define baseline program goals and objectives; (3) need to have a work environment that encourages high quality observers (and therefore high quality data); (4) need to reconcile discrepancies between observer data and vessel data; (5) need to address observer availability issue.

Martin Loefflad provided the Committee a summary of the program, including observer duties, what data they collect, and how it is used. Major issues for resolution from the NMFS perspective remain: (1) conflict of interest which is inherent in the current design of the program; (2) no flexibility in placement of observers where most needed; (3) cost inequity; (4) lack of incentive for quality, long-term observers, and quality data. The Committee noted that, while there are certainly areas for improvement in the program, we still have the best, most comprehensive observer program in the U.S.

CDQ Observer Issues

Sally Bibb reported to the Committee regarding the training and qualification requirements for CDQ observers, noting that NMFS does not feel that the current requirements can be relaxed, unless the Council is willing to alter the program management objectives. The Committee discussed whether there might be a compromise that stays largely within the Council's objectives (hard caps), but is not so onerous. Several issues surrounding observer training and qualification were discussed, but the Committee was in basic agreement that these requirements were appropriate in the context of the Council's October motion. However, the Committee was concerned that the current requirements do have disproportionate impacts to specific sector (even preclude some sectors from participating in the CDQ fisheries), and may provide incentives to avoid observer coverage requirements by using smaller vessels. **Specifically, the Committee (consistent with previous Council action) recommends an analysis to examine CDQ observer requirements for longline catcher vessels >60' which examines management trade-offs associated with potentially reduced coverage requirements.** Such an analysis might also examine the use of video monitors as a supplement to on-board observers.

In a more general discussion of these issues, the Committee raised some alternatives for possible future consideration, including: (1) for CDQ or AFA type fisheries, provide a pooled portfolio of species and put the onus on the group, via contract agreements, to stay within that portfolio; (2) remove the minor species from the CDQ accounting mix and deal with those through some other precautionary estimation approach. Generally the Committee circled back to the question of how exact we need to be in our catch accounting, and what levels of coverage are then required. This issue will be explored more in the Committee's consideration of long-term program changes.

Observer Availability

Related to the CDQ training and qualification requirements is the issue of observer availability. Bridgette Mansfield provided an update on this issue, including current estimates of the numbers of level 2 trained observers available (about 175), which indicates that the shortage of observer this year may not be as bad as last fall when this issue was brought to the Council's attention. However, even the number of trained observers can be misleading, as at certain times of the year these people decline observer deployments. Further, it is likely that some shortages in available observers (level 1 as well as level 2) will continue to be a problem, for the following reasons: (1) with the current economy and low unemployment, there simply are far fewer applicants being recruited for observer positions; (2) even with higher pay, the contractors are not able to recruit nearly as many observers as in previous years (though this past year higher pay was offered at a time when many observers were already committed); (3) except for a handful of people who enjoy the flexibility of observing, being an observer is not a career choice, but rather a stepping stone to other employment (making this more of a career path is something that may be addressed in discussions of longer-term solutions); (4) additional AFA (and possibly other) coverage requirements coming on line.

Given the current program structure, NMFS has little control over the provision of observers to industry by the contractors, and therefore limited ability to affect the short-term availability issue. A long-term solution could be integrated into a restructuring of the program which would include the flexibility to place observers where needed the most, as well as measures to recruit and retain observers to the maximum extent possible. It was also discussed that while there may be an actual shortage, some of the shortage really results from inefficiencies in logistics; i.e., management of observer deployments is an area where improvement is possible which may somewhat mitigate the shortage issue. In-season adjustments to observer requirements (such as was done by NMFS last fall in response to the shortage) is another way to mitigate shortages, though the potential to adversely affect data quality is inherent in that approach, and it should only be used with caution.

Options to address the shortage include: (1) reducing training and qualification requirements; (2) reducing required coverage levels; and, (3) increasing the number of available observers. It will be difficult to increase the number of available observers - we cannot control that variable - unless observer pay reaches a level that entices renewed interest. Reducing training and qualification requirements is not an option from NMFS' perspective (unless, again, we are willing to change our management expectations). Similarly, reducing coverage levels will likely require that we revisit goals and objectives, and the coverage levels necessary to achieve those. **Based on recommendations from contractor representatives, as well as others in attendance, the Committee did identify the following possible areas, which in combination may alleviate the shortage in the near-term:**

- allow CDQ training after deployment, but prior to debriefing (to take advantage of potential 'down-time' while waiting for debriefing).**
- provide a list of CDQ certified observers to all contractors.**
- have CDQ training become part of the standard training class for all observers.**
- consider reducing AFA vessel requirements so that both observer do not have to be level 2.**
- allow flexibility regarding the 90-day maximum deployment rule (and 90 day maximum on any one vessel in 12 months) - perhaps allow a plus or minus 10% to promote efficiencies (and result in cost savings to vessels)**
- encourage more regular, formal contact (maybe workshops) between NMFS program staff and the observer contractors.**

For the longer-term, some additional ideas were raised in the Committee discussions. **One specific recommendation was to encourage the Council to consider reduced coverage levels for AFA vessels in the mid-water pollock fisheries.** It is felt by the Committee that, at least for vessels who do not sort at sea, there may be unnecessarily high coverage in this fishery, and that coverage may be duplicative to the plant observer. This is an area where available observer coverage could be freed up to alleviate the shortage problem, although the Committee recognizes that appropriate coverage levels for all fisheries has to be examined as a long-term program issue. Other considerations relative to this idea include: (1) whether two observers are necessary, or whether both need to be level 2 qualified (for AFA catcher/processors); (2) consider only requiring the 100% coverage (for CVs >125') when fishing non-

pollock fisheries; (3) statistical comparisons could allow post-op examination of whether the reduced coverage is resulting in data deficiencies; (4) critical habitat considerations could be addressed through VMS; (5) for GOA vessels in particular, reduced coverage in pollock fishing could result in increased coverage in other fisheries where data is lacking; for example, allow one pollock trip and count all other fisheries towards to 30% coverage requirements.

Amendments to the current program

The Committee received reports from NMFS staff on the rollover of the existing program through 2002, the development of regulations increasing the hardware requirements for ATLAS, and the omnibus regulatory amendment being drafted for initial review by the Council at the April meeting. **The Committee supports the rollover of the existing program to allow time for further development of long-term program structure changes. Regarding the ATLAS hardware requirements, the Committee supports implementation of those requirements, but did offer the following recommendations in connection with those discussions: (1) that NMFS provide bulletin board reports on amounts of pollock coming from Shelikof (SCA), and (2) that, ideally, all observers should have their own ATLAS-capable laptop computers.**

Regarding the omnibus regulatory amendment package, the Committee understands that it will get an opportunity to review the full analysis of alternatives, after the Council's initial review but prior to final action in June. At that time the Committee can provide recommendations to the Council on preferred options for each issue. The issues, and the Committee's recommendations for the analysis are shown below:

Shoreside plant reporting periods - In addition to the alternatives currently being examined, **the Committee recommends that the analysis also consider using fishery closures as the trigger for weekly coverage requirements (i.e., when the fishery shuts down, due to halibut bycatch or otherwise).**

Shoreside plant observer logistics - move ahead with alternatives as currently drafted.

Concurrent assignment of observers to shoreside plants - move ahead with alternatives as currently drafted.

Groundfish pot observer coverage - **the Committee agrees with the need to address this issue immediately, as the avoidance of observer coverage is compromising data quality. In addition to the specific alternatives currently listed, the Committee recommends consideration of alternatives which would base the coverage trigger on percentage of catch (as opposed to days fished). We also wanted to compare with what is done for trawl fisheries, and, if possible, structure the analysis to cover other gear types.**

Confidentiality of observer personal information - move ahead with alternatives as currently drafted.

Regarding other potential regulatory amendments (such as proposed in the February letter from APO), the Committee feels that these should be dealt with separately and did not consider them for this amendment package; rather, they will be reviewed by the Committee at our next meeting.

Resolution from the Alaska Board of Fisheries

The Committee reviewed the proposal from the Board of Fish (attachment 2), and offers the following comments: Regarding random placement of observers on trawl vessels in the GOA, our current program model does not allow for that, recognizing that this is one of the primary goals of long-term changes to the program. If the Board's request is simply asking that NMFS determine when a particular vessel takes its 30% coverage, as opposed to the vessel deciding, this may be easier to effect but is still not possible under current program regulations. This issue may be addressed through the regulatory amendment discussed above (for example, basing coverage trigger on 30% of catch), and will be addressed in the broader examination of new program structures.

Regarding the other parts of the resolution, it was noted that much of the information being requested is already collected - it is simply a matter of someone making the conversion of lat/long information to state statistical areas. Trawl speed is not collected by observers, due to other duties and uncertainty as to the standard definition (thru water vs over ground, for example). More specific intent of this particular proposal is necessary. It was suggested by the Committee that Board or ADF&G staff confer with NMFS staff to discuss the specifics of this resolution, and determine how to most efficiently synthesize existing information to meet the Board's request. The Committee also noted that the Digital Observer Project (see discussion below), or a similar type system, could also be useful in providing some of the kinds of information in the Board's request.

The Committee reviewed a project summary and request for endorsement from the Digital Observer Project (attachment 3), which is seeking funding support for a pilot project to test a video observer system. **The Committee encourages this type of research and is supportive of the Digital Observer Project obtaining the necessary funding and permits to test this system.** It may have potential merit as a supplement to onboard observers, could be applied for other fisheries or purposes in addition to those outlined in the proposal, and could even help alleviate the observer shortage issue to some degree.

Observer seat on the Advisory Panel

This issue was raised and discussed at some length in the Committee. While there was general consensus that an observer representative would provide an important perspective to the AP, there was discussion as to whether that seat should be allowed to vote. There was also advice from NMFS staff that such a seat should be a currently, or recently, working observer, not be a NMFS employee, and not represent an agency perspective. **In summary, the Committee recommends that the observer seat on the AP be reinstated as a non-voting member.**

Long-term program change

Though the Committee spent most of its time discussing short or intermediate term issues, much of those discussions touched on issues underlying long-term program structural changes. Foremost among those

is definition of goals and objectives, necessary coverage levels by fishery to achieve them, and the appropriate funding and delivery model to place the observers. In order to further develop alternatives, the Committee needs additional information, or updates of previous analyses, relating to program costs and available funds which could be generated under various options. The Committee is targeting mid to late May for our next meeting, at which we will focus on the long-term program alternatives. **To the extent possible, the Committee requests that staff prepare the following information to facilitate those discussions:**

- 1. Relative to the idea of reducing coverage in the mid-water pollock fishery, a quantification of the number of vessels affected, and the potential number of observers which would be freed up.**
- 2. Updated estimates of the costs of current observer coverage, exvessel values, and projected fee necessary. A side-by-side comparison of the various primary alternatives, in terms of costs/revenues as well as other program issues, would also be very useful to the Committee (primary alternatives include status quo, fee plan, TAC set-aside, subsidy programs).**
- 3. A comparison of the foreign observer program, and the legal framework which allowed NMFS oversight and flexibility in placing observers. This would include the issue of 'who is the client' and NMFS vs contractor role in that system.**
- 4. Examination of necessary changes to the Magnuson-Stevens Act to allow each major alternative to be developed.**
- 5. Bar graphs depicting general observer needs in each major fishery on a weekly basis (based on most recent estimates of seasons in BSAI and GOA).**

Additionally, the Committee recommends that analyses of necessary coverage levels by fishery (for various goals and objectives) begin on a parallel track with the above information requests. We also recognize that the MRAG review will be available by early May, which should also provide guidance to the Committee as it considers long-term program issues.

Magnuson-Stevens Act reauthorization

The Committee received a report from Vicki Cornish (Team Leader, National Observer Program) on the efforts to coordinate a national observer policy, as well as on potential reauthorization issues as they may affect our observer program options. **The Committee believes that language in the Act needs to be as generic as possible, to allow us the maximum flexibility in designing a program for the future. The current Research Plan language is not likely the appropriate language to give us that flexibility. The Committee recommends that staff work with HQ personnel as appropriate on this issue, and that the next Council Chairman's meeting place this issue on their agenda for consideration.**

Council Motion on Observer Program from October 1999 Meeting

It is the policy of the North Pacific Fishery Management Council to have the best, most accurate, and responsive fishery monitoring program in the world. Rigorous catch accounting is becoming the norm rather than the exception. The Council believes that the MSCDQ program is a prototype for fishery management in the North Pacific. It has set the stage for implementation of the American Fisheries Act and sea lion conservation measures. The problem is how to reconcile the current observer qualification and training requirements with the realities of the new fishery monitoring and management needs imposed by the AFA, sea lion conservation, and MSCDQ programs. Given the shortages of qualified observers, it is apparent that this problem is reaching a critical level. Therefore, the Council will reconstitute the Observer Committee to include appropriate representatives from industry, observers and observer companies, environmental groups, and CDQ organizations. The Council will ask the committee to review the observer program in its entirety and make recommendations to improve the program to attain the Council's policy objectives.

Attachment 2**ALASKA BOARD OF FISHERIES****Resolution #2000-198-FB****A Resolution to the North Pacific Fishery Management Council and the National Marine Fisheries Service Regarding Observer Data Gathering Protocol Aboard Trawl Vessels in the Gulf of Alaska**

WHEREAS, The North Pacific Fishery Management Council (NPFMC) has delegated responsibility for conservation and management of Gulf of Alaska king and Tanner crab stocks to the State of Alaska; and

WHEREAS, king crab stocks in the Gulf of Alaska have been below harvestable thresholds for the past 17 years and the stock continues to decline; and

WHEREAS, Tanner crab stocks in the Gulf of Alaska have been below harvestable thresholds for the past six years; and

WHEREAS, non-pelagic (hard on bottom) trawling is known to have a bycatch component of king and Tanner crab; and

WHEREAS, king and Tanner crab migrate throughout the federal and state marine waters of the Gulf of Alaska; and

WHEREAS, the NPFMC through the National Marine Fisheries Service (NMFS) has instituted an onboard observe program to monitor trawl fisheries in the Gulf of Alaska; and

WHEREAS, current observer data does not provide enough information to accurately determine the trawl-related impacts on king and Tanner crab stocks in the Gulf of Alaska; and

WHEREAS, the current observer program for vessels between 60 and 125 feet in length allows the vessel skipper to choose when the observer is aboard for the required one-third observer coverage.

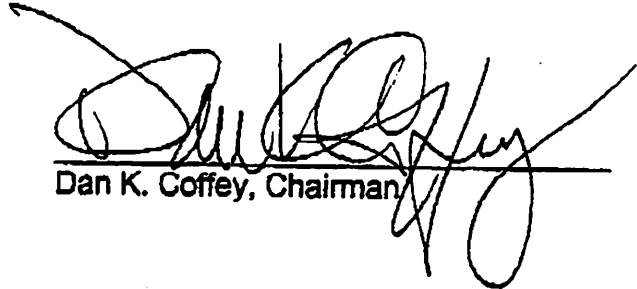
NOW, THEREFORE, BE IT RESOLVED, that the Alaska Board of Fisheries in its concern about the crab stocks in the Gulf of Alaska does hereby make a priority recommendation to the NPFMC and NMFS to take appropriate action to revise the observer protocol for trawl vessels in the Gulf of Alaska as follows:

- **Observers are randomly placed on trawl vessels.**
- **Observers recording of trawl activity (a tow) is located and documented by state statistical area, in both state and federal waters, as well as latitude and longitude.**
- **Observers to record the trawl speed throughout each tow and the time the trawl is in the water on each tow.**
- **Observer bycatch data will include estimation of percent of trip observed, by weight and time. Annual reports will contain a cumulative estimate of percent of fishery observed by weight and time.**

**Alaska Board of Fisheries
#2000-198-FB**

- Observed data will be tallied and published monthly for each state statistical area. Monthly reports will include information about corrections or revisions to prior reports. Annual reports will reflect cumulative totals for each state statistical area.

DATED: January 25, 2000
Juneau, Alaska



Dan K. Coffey, Chairman

Digital Observer Project

Attachment 3

To: NPFMC Observer Committee

From: Mark K. Buckley, Leader,
Digital Observer Project

Re: Research Plan for Scientific Fishing Permit we're requesting your support for

The Digital Observer Project of Kodiak is seeking your support as it attempts to demonstrate that machine vision can be used to identify longline-caught fish at sea. For more information on the project, please refer to the March, 2000 issue of Pacific Fishing Magazine, page 96. That article describes where we are today and where we hope to take the project in the future. Basically, the project seeks to deploy the technologies of automation and machine vision to supplement, and in some cases replace, onboard fisheries observers on longline and other vessels. Benefits to the industry will be reduced cost and liability, improved safety, and the advance of impartial machine analysis of observed fisheries. Government will benefit through an improved data stream.

Some of the project's initial goals are to experiment with digital camera hardware and fish identification software. To that end, we submitted to NPFMC a resolution in favor of our planned applications to NMFS for scientific fishing permits. We are seeking those permits to allow us to charter a longline vessel(s) for a total of 28 days over a 12-month period. We anticipate needing two separate charters: an 18-day period in June 2000 and another 10-day charter in May of 2001. We are requesting permission to retain and sell the fish we catch (exclusive of the halibut) to pay for the charters.

Saltwater, Inc. is involved with and supports the project, and Dr. Dan Ito, head of AFSC's Observer Program, is on the project's advisory committee. Consequently, each charter will be conducted with full observer coverage and the experimental design will be coordinated with NMFS. Data gathered during each charter will be subjected to statistical analysis by project members in consultation with NMFS and under the supervision of Dr. Mitchell Roth, of the University of Alaska Fairbanks's Dept. of Mathematical Sciences. We will provide reports to NMFS, the Observer Committee, and other interested parties on the research conducted during the charters and on our findings.

Charter 1 will be to test and determine the optimal hardware configurations to meet our needs. We will "mix and match" three different types of digital cameras, three different illumination devices, three different distances from camera to fish, three different background colors (necessary to allow edge detection on the fish image) plus experiment with a variety of camera angles to achieve the most definitive photographs. In all, we will conduct more than 90 experiments, gathering up to 50 fish images during each experiment. We'll take those images back to the lab for computer analysis as to which configuration works best.

The 18-day charter will be broken down thus: Set-up and system testing in port (Kodiak), 2 days. Take-down: 1 day. At-sea experimentation: 13 days, or 7 experiments per 12-hour day. Weather days: 2. Charter cost: \$3,800 per day, totaling \$68,400.

The purpose of charter 2, lasting 10 days, and starting in May, 2001, will be to test the accuracy of the fish identification software as applied on a working longliner. The tasks will be broken down thus: Set-up in port (Kodiak): 1 day. Fishing with camera in action: 4 days. On-site software "debugging": 2 days. Shoreside testing: 1 day. Weather: 1 day. Takedown: 1 day. Charter cost: \$3,800 per day totaling \$38,000.

The project has applied to the Alaska Science and Technology Foundation (ASTF) for funding and has raised pledges of support from other industry sources. We will know on April 13 whether the project will be funded. ASTF is allowing the use of fish sale moneys as "matching funds" in support of the project.

It would be helpful to us to have the support of the OAC as a recommendation of support in their report to the council on this meeting. We can keep the OAC updated on the implementation and results of our efforts and are open to suggestions from the committee members as we develop the project.

Box 649 Kodiak, Alaska 99615

Phone: (907) 486-4680 Fax: (907) 486-4684 Email: mkbuckley@yahoo.com

DRAFT

Regulatory Impact Review /
Initial Regulatory Flexibility Analysis

for

A Proposed Rule to Amend Regulations for
Observer Coverage Requirements for Vessels and Shoreside
Processors in the North Pacific Groundfish Fisheries

Date: April 2000

Lead Agency: National Marine Fisheries Service
Alaska Regional Office
Juneau, Alaska
and the
Alaska Fisheries Science Center
Seattle, Washington

Responsible Official: Steven Pennoyer
Regional Administrator
Alaska Regional Office

For Further Information
Contact: Alaska Regional Office
P.O. Box 21668
Juneau, Alaska 99802

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EXECUTIVE SUMMARY

This Regulatory Impact Review (RIR)/ Initial Regulatory Flexibility Act (IRFA) analysis evaluates specific management options and alternatives designed to satisfy five areas of concern that the Council believes detract from the overall achievement of the goals of the Observer Program. These issues are separate such that proposed changes for one issue will not affect the other issues. Each issue is therefore treated separately in this analysis. The options and alternatives analyzed are based largely on recommendations by the North Pacific Fishery Management Council (NPFMC) at its June 1998 meeting.

The areas addressed in this analysis are as follows: (1) Shoreside plant observer coverage - monthly projections of delivery weights which trigger observer coverage may result in unnecessary observer coverage during periods during the month when relatively reduced deliveries are processed; (2) Shoreside plant observer logistics - observers occasionally miss observing deliveries to shoreside plants due to unreliable communication with the plant or unreliable transportation to the plant. Additionally, occasional inadequate housing for observers assigned to plants is experienced; (3) Concurrent assignment of observers to shoreside plants - observers occasionally miss deliveries to shoreside plants due to concurrent assignment to two plants receiving deliveries simultaneously; (4) Groundfish pot fishery observer coverage requirements - observer coverage does not accurately reflect fishing effort in the groundfish pot fishery due to vessels that purposely retrieve only one pot per day an observer is aboard; and (5) Confidentiality of observer personal information - personal information about observers occasionally distributed to industry by contractors has been used to intimidate observers at sea.

SECTION 1: INTRODUCTION AND BACKGROUND

Section 1 of this document presents a brief background and purpose of the North Pacific Groundfish Observer Program along with the five issues under analysis here.

SECTION 2: SOCIOECONOMIC ANALYSES OF THE ACTIONS

This section presents each of the five issues under analysis separately. The treatment of each issue includes the purpose of and need for the action, a description of each alternative presented, a list of fleet fishery and industry directly affected by the action, and impacts of the alternatives.

Proposed Action 1. A request has been made by some shoreside

processors to have weekly, rather than monthly, projections trigger observer coverage for the week at specified thresholds, reducing costs and by a reduction in observer days. For some 100% coverage plants, the current observer coverage regime can result in observer coverage during times when relatively little groundfish is received. This issue is not significant for the 30% plants.

Alternative A - Maintain current observer coverage requirements for shoreside processors that necessitate monthly landing projections by the processors prior to each month.

Alternative B - Require observer coverage at shoreside processors based on weekly, rather than monthly, landings projections as follows: 1) weekly groundfish landings equal to or greater than 125 mt and less than 250 mt would require 30% observer coverage during that week; 2) weekly groundfish landings equal to or greater than 250 mt would require 100% observer coverage during that week. Coverage requirements for CDQ and AFA would supercede general coverage requirements.

Alternative C - Require observer coverage at shoreside processors based on weekly, rather than monthly, landings projections as follows: 1) weekly groundfish landings equal to or greater than 100 mt and less than 200 mt would require 30% observer coverage during that week; 2) weekly landings groundfish equal to or greater than 200 mt would require 100% observer coverage during that week. Thresholds analyzed in this alternative are lower than those in Alternative B and would increase observer coverage requirements over that alternative. Coverage requirements for CDQ and AFA would supercede general coverage requirements.

Impacts of the Alternatives

Alternative A - Under the current monthly coverage regime for months that 100% observer coverage is required for a plant, the average number of weeks per year during which a plant receives or processes low volumes of groundfish is 2.9 weeks for Dutch Harbor plants, 6.8 for Kodiak plants, and 4.4 weeks for all plants. Current coverage in plants allows observers to collect biological samples from a variety of species for use in stock assessments. Species with low sampling effort under the current coverage regime include all rockfish, flatfish other than rock sole, and sablefish. These data are valuable to the management of the public resources, and observer costs are small in comparison.

Alternative B - Estimated Costs to Industry: This alternative would result in a significant reduction of observer days in the 100% and 30% coverage categories, but would result in a increase in observer coverage for a number of plants that currently do not require coverage. The result some redistribution of the cost of observer coverage from the larger shoreside plants to the smaller ones. Based on an average cost of observer coverage to industry,

71% of the cost savings would be realized by plants in Kodiak and Dutch Harbor, or 27% of the plants requiring observer coverage. A full 99% of the cost savings would be realized by all 100% plants. Any coverage regime based on weekly landings would significantly increase the frequency of observer deployment. Costs, such as airfare, that are passed on to the plant by the observer providers would similarly increase. Some level of efficiency in these deployments would occur by consolidating travel and deployments, but a substantial cost increase would remain.

Estimated Costs to Providers: This would also bring significant impacts to the observer providers, likely requiring additional staff and operating costs. As the number of assignments increases, the number of debriefings will increase, creating a backlog of observers waiting to debrief and accruing costs to the provider paying the waiting observers. Undeployed observers also contributes to a potential shortage of available observers. Finally, the increase in shore plant deployments could create conditions under which observers might refuse these deployments, increasing observer turnover at a time of greater need for experienced observers for the Community Development Quota and American Fisheries Act programs.

Estimated Cost to NMFS: Plant observers collect biological samples used in the development of stock assessments, and coverage reduction would result in a similar reduction in biological samples. The current system is barely adequate for biological sampling for low volume fisheries, and the proposed change would further concentrate coverage in high volume fisheries. The greatest data loss would be for species landed in small quantities in different areas and in different times of year such as all rockfish, flatfish other than rock sole, and sablefish. Also, an observer may not have time to understand the plant processing system, resulting in poor data that would negatively impact the reliability of in-season management decisions and stock assessments.

Alternative C - *Estimated Costs to Industry:* Thresholds analyzed in this alternative would result in reduced coverage levels, but the total overall reduction would be less significant than from the thresholds analyzed in Alternative B. Some of the coverage reduction realized from this alternative is offset by an annual increase in coverage for a greater number of plants that currently have either 30% coverage or no coverage at all. Plants in Kodiak and Dutch Harbor, or 27% of plants requiring coverage, would realize 79% of the cost savings under this alternative. One hundred percent of the cost savings would be realized as a group by the 100% plants, since on average, the 30% plants, as well as some that currently require no coverage, would see an increase in coverage. As with Alternative B, this alternative could significantly increase the frequency with which new

observers are deployed.

Estimated Costs to Observer Providers: Costs of this alternative are similar to those described under Alternative B. The increase in deployments under this alternative would result in greater cost increases from the current coverage regime than would Alternative B. This larger number of deployments would also translate to an increase in complexity for deployment logistics.

Estimated Costs to NMFS: Costs of this alternative to NMFS are essentially the same as those described under Alternative B. The slight overall increase in observer days compared to Alternative B as described above could result in a slightly lower reduction of biological samples collected as compared to the current monthly deployment regime.

Proposed Action 2. Shoreside Plant Observer Logistics - Observer companies are required to provide all logistics to place and maintain observers at shoreside processors, including travel arrangements, lodging, and other services required. However, observers have experienced difficulties being present to meet groundfish deliveries due either to unreliable communication or to unreliable transportation. When the plant observer is not present during the delivery, sampling errors can occur and duties cannot be fulfilled leading to data losses. Observers have also reported being housed in substandard lodging while deployed at plants. The Observer Program has determined that these difficulties have been corrected by observer providers, although these problems could resume at any time. However, such problems could recur in the future.

Alternative A - Maintain current requirements for contractors to provide general logistical support to place and maintain observers at shoreside processing sites.

Alternative B - Require observer contractor to provide: clean, dry, quiet housing; reliable communication equipment such as a phone at the observer's accommodations, VHF radio or pager for notification of upcoming deliveries or other necessary communication, and safe, reliable, motorized transportation to the plant if the observer's accommodations are greater than 1 mile away from the processing facility.

Alternative C - Require the observer contractor to provide: reliable communication equipment such as a phone, VHF radio or pager for notification of upcoming deliveries or other necessary communication, and safe, reliable, motorized transportation to the plant if the observer's accommodations are greater than 1 mile away from the processing facility.

Impacts of the Alternatives

Alternative A Observers have failed to be present at a plant at the time of a delivery because of lack of notification or transportation approximately 6-8 times per year from 1996 to

1998, a relatively small percentage of the total number of plant deliveries, resulting in lost data for prohibited species catch accounting and biological samples. Sampling errors by vessel observers have occurred due to the plant observer not being present to advise the vessel observer of the plant procedures. The cost is a degradation of the quality and quantity of data available to fisheries managers and scientists that could result in decreased confidence in stock assessments and inaccurate quota or prohibited species catch estimations. Unsatisfactory housing conditions could lead to observers refusing assignments to certain plants or dissuading them from future deployments, contributing to a growing concern over observer availability. The observer providers that supply observers to shoreside processors have indicated that they have corrected these problems, and the Observer Program reports that they have not had complaints from observers about these issues in over a year. Therefore the cost of retaining the status quo alternative may be relatively small, except that the potential exists for such problems to arise in the future.

Alternative B Although observer providers have indicated that they have corrected the deficiencies, these could recur in the future if regulations are not implemented. Under the assumption that each of the specific concerns have been voluntarily resolved by the industry and/or observer providers, then adoption of this alternative would impose no attributable incremental cost, while also providing the benefits of the regulatory safeguards which would prevent recurrence of these conditions.

Alternative C This alternative would ensure reliable, motorized transportation between an observer's lodging and the plant, but would not ensure an adequate quality of housing while assigned to a plant. Adverse implications of the potential for an observer to be housed in substandard lodging are the same as those indicated in Alternative A for this housing quality issue. A reduction in observer job performance, effectiveness, and morale could lead to a reduction in data quality.

Proposed Action 3. Assignment of Observers to Multiple Shoreside Plants - Individual plant observers in Kodiak and Dutch Harbor are often assigned to provide coverage for more than one plant in a day. When concurrent deliveries occur at two different plants to which a plant observer is assigned, that observer can meet the delivery and perform required duties at only one plant, leaving the other plant without coverage for that delivery. Six plants in Kodiak and two in Dutch Harbor share observers. The problem of missed deliveries due to concurrent deliveries at both plants covered by one observer is particularly limited to the pollock fishery and is most acute in Kodiak. Plant observers duties are not completed when the observer is not present during the

delivery. This issue is resolved for the Bering Sea in the implementing regulations for the AFA. An observer must be available to monitor each delivery at every plant to which they are assigned at the prescribed coverage levels without simultaneous, conflicting duties.

Alternative A - Maintain current practice of no restrictions on the number of plants to which an observer may be concurrently assigned.

Alternative B - restrict concurrent assignment of an individual observer to shoreside processors during periods of open, directed pollock fishing, such that the observer will not be responsible for coverage in any one day, where a day is a 24 hour period from 0000 hrs A.L.T. - 2400 hrs A.L.T., for more than one shoreside processor which requires observer coverage for any day that the plant receives or processes deliveries. Additionally, in any single contract during open, directed pollock fishing, an observer cannot be assigned to cover concurrently more than: (1) one plant requiring observer coverage during a calendar month for each day it receives or processes groundfish during that month; or (2) two plants, each requiring observer coverage during a calendar month for 30% of the days it receives or processes groundfish during that month.

Impacts of the Alternatives

Alternative A - NMFS' ability to collect adequate data for the management of the groundfish fisheries, including accounting for prohibited species bycatch, at plants which share observers is in question. Although the frequency with which observers miss deliveries due to concurrent deliveries at two different plants is not great, the potential for missed deliveries to increase at the plants in question if delivery frequencies increase or the practice of sharing observers spreads to other plants exists. Industry could incur costs from the potential mis-allocation of TAC resulting in premature fishery closures due to inaccurate catch accounting.

Alternative B - Plants requiring 100% coverage would incur the entire cost of each observer day they received coverage. The observer costs for these 100% plants would, therefore, be roughly double their current costs of coverage, although no higher than other "100%" plants that do not share an observer, essentially creating a cost equity for all 100% plants. Two 30% coverage plants that share an observer would still be able to pay for half of an observer, so no additional costs would be incurred for these plants under this alternative. However, these plants would have to schedule their deliveries in such a way that the two plants do not receive or process deliveries on the same day for every day of the month.

Proposed Action 4. Groundfish Pot Fishery Observer Coverage Requirements - Observer coverage requirements for vessels fishing for groundfish for pot gear is based on fishing days rather than gear fished. Reports have been filed since 1996 by observers documenting circumstances where vessel operators indicated that they were retrieving only one pot while the observer was aboard simply to meet the minimum coverage requirement. While this technically satisfies coverage requirements, it is not considered within the range of the normal fishing activity. Occasions may arise when a trip must be foreshortened or the number of sets retrieved in a day may be fewer than normal, but a deliberate effort to reduce effort when an observer is aboard results in observed fishing days not being representative of fishing effort as intended. Observer coverage requirements are designed to capture unbiased data for a given fishery under normal fishing conditions. Overall observer data for the groundfish pot fishery from 1998-1999 indicate that an average of 123 pots were retrieved per day when an observer was aboard. Observer coverage of fishing days with significantly reduced numbers of gear retrievals results in far less observer data collected relative to actual fishing effort. When extrapolated to the level of the fleet, these observer data take on a far greater significance than they are designed to do. Observer coverage should reflect actual fishing effort within this fishery, so that information received by in-season managers accurately reflects catch levels.

Alternative A - Maintain current observer coverage requirements for vessels equal to or greater than 60 ft LOA fishing with pot gear that participate more than 3 days in a directed fishery for groundfish in a calendar quarter to carry an observer at least 30 percent of their fishing days, as defined, while using pot gear in that calendar quarter, and during at least one entire fishing trip using pot gear in a calendar quarter for each fisheries category in which the vessel participates.

Alternative B - Amend observer coverage requirements for a vessel equal to or greater than 60 ft LOA fishing with pot gear that participates more than 3 days in a directed fishery for groundfish in a calendar quarter so that such a vessel must have an observer aboard during at least 30 percent of the total pot retrievals by that vessel in that calendar quarter, rather than for 30 percent of its fishing days in that calendar quarter. Groundfish would be required to be retained each day the observer is on board and gear is retrieved.

Alternative C - Amend the definition of a fishing day for pot vessels, for purposes of observer coverage, as a 24 hour period from 0001 hrs A.L.T. - 2400 hrs A.L.T. during which at least 12 ~~sets~~ ^{pots} are retrieved and groundfish are retained.

Alternative D - Amend the observer coverage requirements for all vessels equal to or greater than 60 ft LOA fishing with pot gear that participate more than 3 days in a directed fishery for

groundfish in a calendar quarter while using pot gear to require each vessel to carry an observer each day it fishes with pot gear during a calendar quarter.

Impacts of the Alternatives

Alternative A - With pot vessels circumventing the intent of the coverage level requirements, NMFS' ability to collect adequate data for the management of this fishery is compromised. The increasing frequency with which observer coverage falls short of reflecting actual fishing effort results in biased data used for estimating prohibited species bycatch, discard rates and total catch. Inaccurate catch accounting may result in fisheries closures occurring before allocations are reached or after quotas are exceeded. Premature closures cause forfeit of valuable catch and could adversely impact product supply and prices paid by consumers. Delayed closures of the fishery due to "distortion" of observer coverage, cause fishery resources to be less efficiently and effectively managed, with adverse long term implications for productivity and future catch levels. While these costs cannot be readily estimated, they do represent a real potential loss associated with this behavior. The average cost of observer coverage per year for the entire fishery for 1998-1999 is \$218,430, or \$2,060 per vessel, or approximately 1.6% of the gross revenues for this fishery for these years.

Alternative B - This alternative, in which coverage levels are based on a percentage of gear retrieved, provides an incentive for vessels to maximize fishing effort while carrying an observer aboard. The more gear a vessel retrieves while an observer is onboard, for the sooner coverage requirements will be met for that quarter. Meeting coverage requirements with fewer observer days would reduce observer costs to the vessel. This alternative would benefit NMFS by enhancing its ability to obtain observer data that reflects a known portion of actual fishing effort.

Alternative C - This would require applying a minimum fishing effort to each observer day for that day to count toward coverage requirements. The current average pot retrievals per day is 123, although variations occur for a variety of reasons. Setting a minimum limit on gear retrievals to validate an observer day could unfairly constrain fishing practices, possibly endangering the vessel and crew. This could also result in added costs to the vessel for each day that it carried an observer, but did not meet the minimum retrieval limit for legitimate reasons. The actual burden this might represent is questionable, however, since this provision applies to vessels which are currently only required to carry observers for 30% of their fishing time.

Alternative D - This level of data is not necessary for scientific or management purposes. Additional costs would be

realized by 30% coverage vessels and would approximately triple the costs currently incurred. In addition, it would contribute to inefficient use of the limited number of observers available for coverage in all fisheries, reducing available observers where coverage needs are greater.

Proposed Action 5. Confidentiality of Observer Personal

Information - Observers have reported since 1991 that resumes containing employment histories, home addresses and phone numbers, as well as past observer deployment evaluations have been forwarded to fishing companies by the observer contractors without the observer's permission. This personal information was often forwarded on to individual vessels aboard which the observer was deployed. The potential for misuse and abuse of this personal information is clear and overt intimidation of observers is the primary concern. This type of direct or implied intimidation can result in observers, particularly those less experienced, declining to report potential violations witnessed during a deployment, thus undermining their effectiveness in monitoring fisheries activities and practices. Such personal information about observers should remain confidential and not distributed to the fishing industry.

Alternative A - Maintain current NMFS policy requesting that observer contractors refrain from distributing personal information about observers, such as resumes, observer evaluations and deployment ratings, to industry, but would not include as regulation.

Alternative B - Amend regulations to prohibit observer contractors from distributing personal information, such as observers' resumes, observer evaluations and deployment ratings, home addresses and phone numbers to industry.

Impacts of the Alternatives

Alternative A - Retention of the status quo could jeopardize NMFS' ability to collect scientific data and monitor the prosecution of these groundfish fisheries covered by observers (including information on potential violations), due to the potential for intimidation of observers through the means described above. Additionally, the potential for unfavorable or hostile working conditions for observers could continue, contributing to factors that may persuade observers to choose not to continue in this job, exacerbating the problem of attracting and retaining qualified observers.

Alternative B - This would result an increased confidence in observers' ability and willingness to collect and report required data, including information on potential violations, without fear of having personal information, supplied by the contracting firm, used by vessel or plant personnel as a means of intimidation.

This would also be expected to result in better overall management of the North Pacific groundfish fisheries, and avoidance of the potential costs associated with the status quo alternative. There are no direct or immediate fiscal costs associated with this alternative, since all regulated firms assure NMFS that they have voluntarily ceased this practice.

1.0 INTRODUCTION

The requirements for all regulatory actions specified in Executive Order (E.O.) 12866 are summarized in the following statement from the order:

In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

Executive Order 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A regulatory program is "significant" if it is likely to result in the effects described above.

The National Marine Fisheries Service manages the U.S. groundfish fisheries of the Gulf of Alaska and the Bering Sea and Aleutian Islands management areas in the Exclusive Economic Zone under the Fishery Management Plans (FMPs) for those areas. The North

Pacific Fishery Management Council prepared the FMPs under the authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations implement the FMPs at 50 CFR part 679. General regulations that also pertain to U.S. fisheries appear at subpart H of 50 CFR part 600. Regulations implementing the interim Groundfish Observer Program were published November 1, 1996 (61 CFR 56425) and amended December 30, 1997 (62 CFR 67755). NMFS' North Pacific Groundfish Observer Program provides for the collection of observer data necessary to manage Alaska groundfish fisheries by providing information on total catch estimation, discard, prohibited species bycatch and biological samples that are used for stock assessment purposes. The observers also provide information related to compliance with regulatory requirements.

The North Pacific Fisheries Management Council requested at their June 1998 meeting that NMFS analyze alternatives to respond to five areas of concern that the Council believes detract from the overall achievement of the goals of the Observer Program. These issues are separate such that proposed changes for one issue will not affect the other issues. Each issue is therefore treated separately in this analysis. A preliminary determination has been made that a proposed rule that combines these actions would warrant a Categorical Exclusion from National Environmental Policy Act (NEPA) requirements for an Environmental Assessment (EA) based on an assessment that the actions would not result in a significant change in the original environmental action because it would implement minor technical changes to an existing regulation.

The areas addressed in this analysis are as follows: (1) Shoreside plant observer coverage - monthly projections of delivery weights which trigger observer coverage may result in unnecessary observer coverage during periods during the month when relatively reduced deliveries are processed; (2) Shoreside plant observer logistics - observers occasionally miss observing deliveries to shoreside plants due to unreliable communication with the plant or unreliable transportation to the plant. Additionally, occasional inadequate housing for observers assigned to plants is experienced; (3) Concurrent assignment of observers to shoreside plants - observers occasionally miss deliveries to shoreside plants due to concurrent assignment to two plants receiving deliveries simultaneously; (4) Groundfish pot fishery observer coverage requirements - observer coverage does not accurately reflect fishing effort in the groundfish pot fishery due to vessels that purposely retrieve only one pot per day an observer is aboard; and (5) Confidentiality of observer personal information - personal information about observers occasionally

distributed to industry by contractors has been used to intimidate observers at sea.

2.0 ANALYSIS OF EACH PROPOSED ACTION AND ASSOCIATED ALTERNATIVES

2.1 Shoreside Plant Observer Periods

2.1.1 Purpose of and Need for the Action

Current regulations at §50 CFR part 679.50(d) require each shoreside processor to project for each calendar month the amount, in metric tons, of groundfish that is expected to be received or processed at that facility. Observer coverage requirements for each month are based on those projections as follows. A plant that processes 1,000 mt or more in round weight equivalent of groundfish is required to have an observer present at the facility each day it receives or processes groundfish during that month. For purposes of this analysis, these plants are considered to be "100%" plants. A plant that processes 500 to 1,000 mt in round weight equivalent of groundfish is required to have an observer present at the facility at least 30 % of the days it receives or processes groundfish during that month. For purposes of this analysis, these plants are considered to be "30%" plants. Some plants may alternate between 30% and 100% coverage from month to month, and for this analysis are designated in the category which the majority of coverage months fall in a given year.

This coverage regime can result in observer coverage during times when relatively little groundfish is received by some plants. This issue is not significant for the 30% plants, but is experienced primarily by the 100% plants. For instance, if 1,000 mt of groundfish is received or processed by the end of the first or second week in a month, a plant is required to have coverage for every day it receives or processes groundfish for the rest of that month. This same plant may receive or process only very small amounts of groundfish for the remainder of the month, but would still be required to maintain 100% observer coverage for all deliveries or processing days.

It is the intention of the alternatives described below to respond to the request by some shoreside processors that they be allowed to make weekly, rather than monthly, projections which would trigger observer coverage for the week at specified thresholds. In this way, these plants would anticipate a costs savings by reducing the number of observer days required.

2.1.2 Description of the Alternatives

Alternative A

The status quo alternative would maintain current observer coverage requirements for shoreside processors that necessitate monthly landing projections by the processors prior to each month. A plant would be required to have 100% or 30% observer coverage for the days groundfish are received or processed, depending on the threshold triggered by the landings projections as stipulated by regulations referenced above.

Alternative B

This alternative would require observer coverage at shoreside processors to be based on weekly, rather than monthly, landings projections. Weekly thresholds would trigger weekly observer coverage requirements for a given shoreside processor. The thresholds analyzed in this alternative are based on the current monthly thresholds broken down into four equal weekly levels. The thresholds are as follows: 1) Projected weekly landings of groundfish equal to or greater than 125 mt and less than 250 mt would require observer coverage for 30% of all days that groundfish are received or processed during a given week. 2) Projected weekly landings of groundfish equal to or greater than 250 mt would require observer coverage for 100% of the days that groundfish are received or processed during a given week. The CDQ and AFA program observer coverage requirements currently supercede general observer coverage requirements and require that every haul, set or delivery is monitored. The CDQ and AFA coverage requirements would continue to take precedence over general coverage requirements under this alternative, requiring that every delivery be monitored regardless of weekly or monthly landings thresholds.

Alternative C

This alternative would also require observer coverage at shoreside processors to be based on weekly, rather than monthly, landings projections. Weekly thresholds would trigger observer coverage requirements for a given shoreside processor. The thresholds analyzed in this alternative are lower than those in Alternative B and would therefore trigger observer coverage requirements sooner. These thresholds are as follows: 1) Projected weekly landings of groundfish equal to or greater than 100 mt and less than 200 mt would require observer coverage for 30% of all days that groundfish are received or processed during a given week. 2) Projected weekly landings of groundfish equal to or greater than 200 mt would require observer coverage for

100% of the days that groundfish are received or processed during a given week. The CDQ and AFA program observer coverage requirements currently supercede general observer coverage requirements and require that every haul, set or delivery is monitored. The CDQ and AFA coverage requirements would continue to take precedence over general coverage requirements under this alternative, requiring that every delivery be monitored regardless of weekly or monthly landings thresholds.

2.1.3 Description of fleet, fishery, & industry directly impacted by proposed actions

The following shoreside processors receive and process groundfish from North Pacific fisheries. The plants that would be impacted by the proposed action fall into three categories: (1) 100% plants; (2) 30% plants; and (3) plants which receive or process groundfish in small quantities that do not reach a threshold which would trigger observer coverage. These "0%" plants that are referenced below would require observer coverage under either Alternative B or C.

Table 2-1 Shoreside plants and associated observer coverage levels based on existing regulations - 100% Plants

100% Observer Coverage Plants	Area	Primary Products - 1998
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Alaska Pacific Seafoods	Kodiak	Pollock: surimi, fillet; Pcod: fillet
Alyeska Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Arctic Enterprise		Pollock: fillet, fishmeal
Cook Inlet ¹	Kenai	Pollock: h&g, fillet
Cook Inlet	Kodiak	Pollock: h&g, fillet
Cook Inlet	Seward	Pollock: whole, fillet
Int'l Seafoods ²	Shelikof	Pollock: fillet, surimi; Pcod: fillet
King Crab, Inc		Pollock: fillet; Pcod: fillet ⁴
N Pacific Processors ³	Cordova	Pollock: fillet, roe
Northern Victor		Pollock: fishmeal, fillet
Ocean Beauty	Kodiak	Pollock: fillet; Pcod: fillet
Peter Pan	King Cove	Pcod: fillet, salted; Pollock: fillet
Star of Kodiak	Kodiak	Pollock: fillet, surimi
Trident Seafoods	Akutan	Pollock: surimi, fishmeal, fillet
Trident Seafoods	Sand Point	Pollock: surimi, meal, fillet; Cod fillet
Unisea	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Western Alaska	Kodiak	Pollock: surimi, fillet
Westward Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil

Table 2-2 Shoreside plants and associated observer coverage levels based on existing regulations - 30% Plants

30% Observer Coverage Plants	Area	Primary Products - 1998
Deep Creek Custom Pack	Homer	Pcod: whole
Great Pacific	Anchorage	Pcod: h&g, fillet
Icicle Seafoods	Seward	Sablefish: h&g;
Int'l Seafoods ⁵	Shelikof	
North Pacific Processors ⁶	Cordova	
Resurrection Bay	Seward	Sablefish: h&g; Pcod: h&g
Sahalee of AK	Anchorage	Sablefish: h&g; Pcod: h&g
Seward Fisheries	Seward	Sablefish: h&g;
Wards Cove	Seward	Pcod: h&g; Sablefish: h&g

Table 2-3 Shoreside plants and associated observer coverage levels based on existing regulations - "No Coverage" Plants

0% Observer Coverage Plants	Area	Primary Products 1996 - 1998

¹ 1996, 1998

² 1997-98; although this plant is located on Kodiak Island, it is not included in the group of "Kodiak" plants in this analysis, since it is located quite a distance from the plants in or near the town of Kodiak

³ 1997-98

⁴ 1997

⁵ 1996

⁶ 1996

ADF, INC	Chignik	Pcod: whole, h&g
Alaska Custom Seafoods	Homer	Pcod: gutted, head on
Alaska Fresh Seafoods	Kodiak	Sablefish:H&g; Pcod:h&g
Cook Inlet ⁷	Kenai	
Dragnet Fisheries Co.	Kenai	Sablefish:h&g;
Great Pacific	Anchorage	Pcod: h&g, fillet
Icicle Seafoods	Petersburg	Sablefish: h&g
Kake Fisheries	Kake	Sablefish: h&g
Kingfisher Seafoods Co.	Dutch Harbor	Pcod: bait
Sahalee of AK	Anchorage	Sablefish:h&g; Pcod:h&g
Salmatof	Kenai	DFL4: h&g GRTB: h&g
Seafoods Producers Coop	Sitka	Sablefish:h&g;
Sitka Sound	Sitka	Sablefish:h&g;
Sitka Sound	Yakutat	Sablefish:h&g;
Taku Smokeries	Juneau	Sablefish:h&g;

In addition to the fisheries harvesting and processing industry impacted by this action, the six observer provider companies that are certified by NMFS to supply observers to the fishing industry through direct procurement as needed would likewise be impacted. For the past several years there have been five primary observer providers, with a sixth added in 1999. That firm, a Canadian company that has supplied observers to Canadian fisheries, has not begun to supply observers to the North Pacific groundfish fleet. These companies are small, employing between 2 and 10 employees, although one firm is owned by a larger company that has interests other than observer provision. Staff are responsible for recruiting and hiring qualified observers, providing observers as requested to industry, providing all logistics to place and maintain observers aboard fishing vessels or at plant sites (including travel, lodging and other services necessary), ensuring that all data, samples and reports are submitted to NMFS and debriefings are completed in a timely manner, and adhering to all applicable regulations and policies covering the deployment of observers and required reports. The firms are located in Alaska, Washington, Oregon and Nova Scotia, Canada.

Table 2-4 NMFS-Certified Observer Providers

NMFS Certified Observer Provider	Location
Alaskan Observers, Inc	Seattle, WA
Data Contractors, Inc	Anchorage, AK
Frank Orth & Associates	Bellevue, WA
Northwest Observers, Inc	Sisters, OR

⁷ 1997

Saltwater, Inc	Anchorage, AK
TechSea International	Nova Scotia, Canada

2.1.4 Impacts of the Alternatives

Alternative A

Under this alternative, plants would operate according to the current system of projecting total monthly landings by weight to determine the level of observer coverage required for that month. During some months for some plants this can result in observer coverage at times when very little groundfish are received as noted above. Under the current monthly coverage regime and for the months that 100% observer coverage is required for a plant, the average number of weeks per year during which a plant receives or processes between zero and 125 metric tons of groundfish is noted in Table 2-5. This range of landings represents periods when observer coverage is required, but total landings weights are relatively low. Kodiak plants are approximately 65% above the average for all 100% plants for weeks with low landings levels, while the plants in Dutch Harbor are about 43% below this average. The plants in Dutch Harbor have fewer weeks per year with relatively low volume of landings than have the plants in Kodiak.

Table 2-5 Weeks with landings between 0 and 125 metric tons -
100% Plants

100% Plants	For Months w/Observer Coverage: Average Weeks/Year/Plant w/Landings >0 mt and <125 mt	Estimated Observer Costs/Year/Plant for Weeks w/Landings >0 mt and <125 mt (dollars)
All	4.4	1,188 - 8,316
Kodiak	6.8	1,836 - 12,852
Dutch Harbor	2.9	783 - 5,481

The current observer coverage in plants allows observers to collect biological samples from a wide variety of species for use in stock assessments. The deliveries outside high volume weeks in a month often consist of a variety of species that are generally caught in smaller quantities. Species with already low sampling effort under the current observer deployment regime include all rockfish, flatfish other than rock sole, and sablefish. These data are very valuable to the efficient

management of the public resources, and observer costs are very small in comparison.

Alternative B

Estimated Costs to Industry:

This alternative would result in a significant reduction of observer days in the 100% and 30% coverage categories, but would result in an increase in observer coverage for a number of plants that currently do not have any coverage requirements. The result is a redistribution of a portion of the cost of observer coverage from the larger shoreside plants to the smaller ones, with no appreciable increase in data needed for fisheries management. Based on an average cost of observer coverage to industry of \$270/day, 71% of the cost savings under this alternative would be realized by the 10 plants in Kodiak and Dutch Harbor, which represent 27% of the plants requiring observer coverage. A full 99% of the cost savings would be realized by all plants that are generally considered 100% plants, which receive and process the vast majority of the groundfish catch.

With the implementation of the Community Development Program (CDQ) and the American Fisheries Act (AFA), which require catch accounting at the vessel and co-operative levels, respectively, rather than fleet-wide, a need was seen for deploying observers with prior observing experience and additional training in these fisheries because of the need for extremely high quality data. The observers who have met the qualifications and training requirements are considered to be Level 2 observers. Contractors have not yet determined whether they will charge industry more for Level 2 observers beginning in 2001, therefore an increase in cost for AFA and CDQ deliveries for each plant was not considered in this analysis. Two observers are required at plants receiving CDQ and AFA pollock deliveries when the deliveries occur over more than 12 consecutive hours per day. The number of days that plants received or processed CDQ deliveries in 1999 was 35. For purposes of this analysis, it is assumed that this number will be similar for 2000. It is estimated that the seven AFA inshore processors will receive or process AFA deliveries in 2000 during approximately 98 days. Because every AFA or CDQ delivery must be monitored, regardless of projected landings in a week or month, this would reduce some level of projected cost savings under this alternative. However, because it is impossible to project when these deliveries will occur, they cannot be factored into this analysis accurately.

Table 2-6 Observer coverage reduction with weekly reporting

thresholds: 125-249 mt - 30% coverage; >250 mt - 100% coverage. Based on data from 1996-1998

Plants	Number of Plants	Average Annual Reduction in Observer Days	Percent Annual Reduction in Observer Days	Annual Reduction in cost [observer days only] (dollars)	Avg Annual Cost Savings Per Plant (dollars)
All	37	617	22.5	166,590	4,502
Kodiak	7	302	26.9	81,540	11,649
Dutch	3	137	20.1	36,990	12,330
100%	18	612	24.7	165,240	9,180
30%	9	17	30.4	4,590	501
0%	8	-11	--	-2,970	-371

Any observer coverage regime that is based on a plant's weekly projections of landings would significantly increase the frequency with which new observers are deployed. There are currently twelve potential deployment periods per plant per year. For all plants this equals a total of 444 deployment periods per year, although the number of months observer coverage is required varies from plant to plant. Under a weekly regime, there are fifty-two potential deployment periods per plant, or 1924 potential weekly deployments for all affected plants, an increase of 333%. However, the vast majority of plants require observer coverage for only a portion of a year. Based on data from 1996 through 1998, an average of 116 monthly observer deployments per year for all plants occurred. This would translate to an annual average of 357 weekly observer deployments to all plants, an increase of 207%. However, there is no assurance that the number of weekly deployments will not be higher, given possible future changes in fisheries management due to a changing regulatory environment, e.g. AFA, Steller sea lion conservation measures, etc.

Deployment costs, such as airfare, that are passed on to the plant by the observer providers would also likely increase by a similar order of magnitude. However, the means by which these costs are passed to industry clients varies from one observer provider to another. As noted below, the potential wide variation in logistics that a weekly regime would present makes it difficult to forecast with any precision this deployment cost to industry. It is assumed that some level of efficiency in these deployments would be found by consolidating travel and use of observers, but a substantial increase in related costs would

still remain.

Additionally, the margin of error for logistics decreases with shorter deployments. Alaska has severe and unpredictable weather. Commercial flights are often delayed or canceled, making travel to or from shoreside processing communities problematic during significant portions of the year. For example, in Adak there are only two flights per week, and even if an observer was available, a missed or over-booked plane could easily result in non-compliance with coverage requirements for that weekly period. If a plant underestimates their projected landings for a week, and an observer has already been re-deployed elsewhere, obtaining the coverage for the remainder of that period would be difficult, and the plant runs the risk of being in violation of coverage requirements.

These costs, while not amenable to quantification, could be substantial, especially if catch could not be offloaded or processed because of the absence of the required monitoring. The vessel operator and processor would be placed in the untenable position of either landing the catch in violation of observer requirements or delaying the off-load. Either eventuality could impose significant adverse economic and operational impacts on the industry, and further diminish the agency's ability to effectively and efficiently manage this valuable resource.

Estimated Costs to Observer Providers:

The logistics of deploying observers on a weekly basis versus on a monthly basis to the plants could represent a significant increase in number of observer deployments to plants as noted above. This change would bring significant impacts to the observer providers. The time involved in providing logistical arrangements would increase to a degree that it is probable that observer providers would not be able to handle them with existing staff levels, requiring them to hire additional staff and incur potentially significant additional operating costs.

Weekly deployments would require observers to be deployed at plants for shorter periods of time, resulting in more frequent intervals between actual assignments in any given observer contract. These are days that the observer provider is paying the observer, but not realizing any income from a client. The pay scale for observers under contract but not deployed varies between providers from a minimum per diem allowance to actual deployment pay, so it would be difficult to estimate a generalized cost that this would represent.

The weekly deployment regime would increase the likelihood of an observer waiting between assignments from one to seven days. An observer under contract who is between assignments for more than six days may be required by the observer provider to be debriefed. The Observer Program also requires an observer to debrief after four different assignments in one contract. As the number of assignments increases under a weekly deployment regime, the overall number of debriefings will increase, contributing to a backlog of observers waiting to debrief and accruing costs to the provider who is paying the observers while they wait to debrief. This also contributes to a potential shortage of available observers by making observers unavailable for deployment during debriefing.

The observer provider is responsible for providing the observer's transportation between Anchorage or Seattle and the point of deployment, including airfare, taxi and observer per diem. Additional deployments and debriefings increase these costs, although they are passed on to the industry client to some degree. Some efficiency in logistics would likely be realized through consolidating observer travel and scheduling deployments, reducing this cost somewhat.

Finally, the substantial increase in short plant deployments could create conditions under which observers would begin to refuse these deployments, thereby increasing observer turnover at a time when a greater need for experienced observers is developing under the Community Development Quota and American Fisheries Act programs. An observer could easily grow frustrated by not being able to remain at a plant long enough to develop the confidence and knowledge of the plant's particular operating system needed to accomplish a plant observer's many duties. In addition, simply changing working environments every week for up to three months would be physically, mentally and emotionally taxing on an observer.

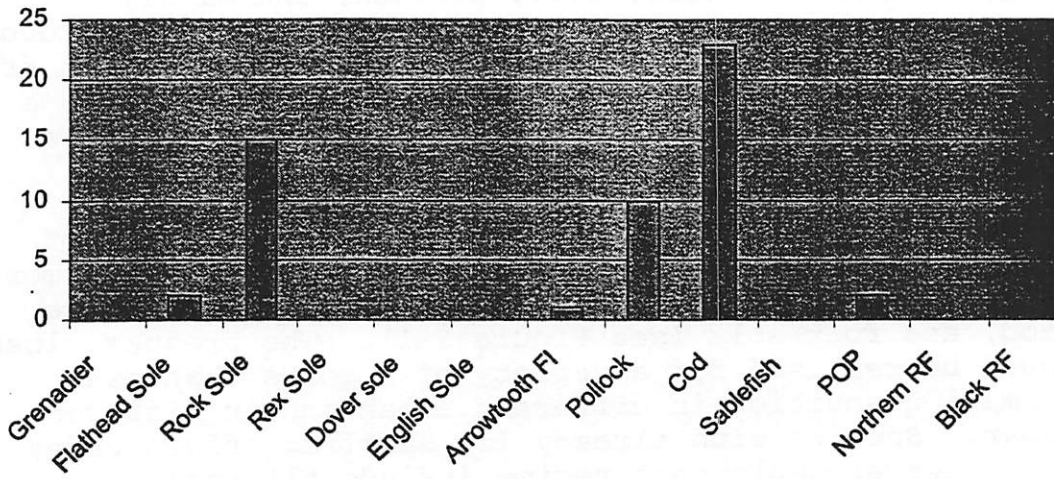
Estimated Cost to NMFS:

Observers deployed at plants collect biological samples, which are used in the development of stock assessments. A reduction in observer coverage would result in some reduction of the number of biological samples collected by observers. The largest deliveries to plants are generally pollock, with the smaller deliveries being made up of a variety of species, such as rockfish, flatfish and others. If the current monthly reporting period was changed to a weekly reporting period with tonnage thresholds of 125 mt and 250 mt received or processed per week that trigger 30% and 100% observer coverage, respectively, a

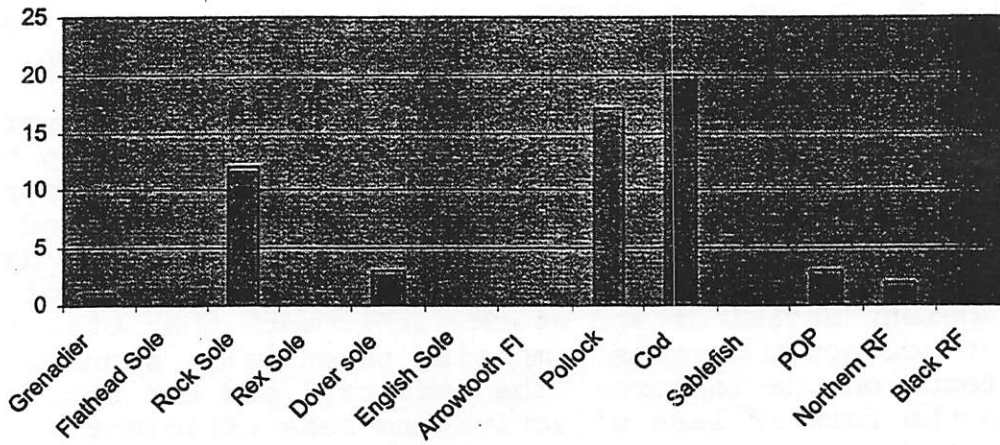
decrease in biological samples would result. The current system of allocating observers to plants provides adequate samples for intense, high volume fisheries, i.e., pollock, and barely adequate or inadequate coverage for low volume fisheries. Future assessment needs are likely to include increased information from low-volume fisheries. The proposed change from a monthly to a weekly coverage requirement would tend to further concentrate coverage in high volume fisheries, so the smallest loss in biological samples under this alternative would be those collected from pollock due to the large volume of landings of this species. The only groundfish species that are sampled more often than 10 weeks out of the year in the Gulf of Alaska are pollock, cod, and rock sole (see Figure 2-1). The greatest loss in data would be realized for a variety of species that are landed in small quantities in different areas and in different times of year. Species with already low sampling effort under the current observer deployment regime include all rockfish, flatfish other than rock sole, and sablefish.

Under normal conditions, an observer usually needs several days to understand the processes and procedures in a given plant, if they have never been to that plant before. With weekly deployments, even for 100% coverage requirements, an observer may spend his or her entire deployment at the plant just trying to understand that particular system. This would result in poor data from the plant observer and vessel observers who depend on the plant observer for guidance on plant procedures. Poor data from these plants would negatively impact the reliability of in-season management decisions and stock assessments that utilize the observer collected samples, imposing potentially significant adverse effects on the resource, the industry, and the nation as a whole, in the form of less effective and less efficient resource management.

1997



1998



1999

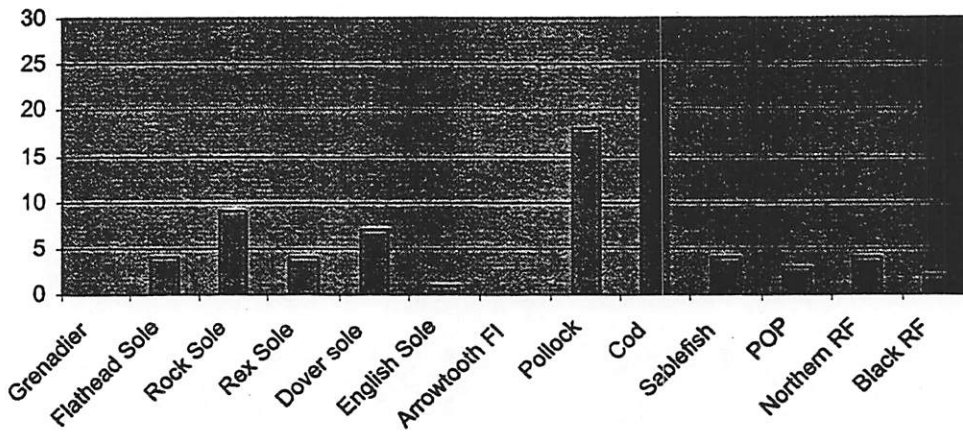


Figure 2-1. Number of weeks during which ageing structures were sampled by plant observers in the Gulf of Alaska in 1997-99.

Alternative C

Under this alternative the monthly landings projections and consequent observer deployment regime would be shifted to a weekly regime as in Alternative B, but with lower weekly landings thresholds triggering observer coverage requirements as follows: 100 metric tons received by a plant in a week would require coverage for 30% of the days that groundfish are received or processed, and 200 metric tons per week would require coverage for every day that groundfish are received or processed.

These thresholds result in reduced observer coverage levels from current annual coverage levels, but the total overall reduction would be less significant than from the thresholds analyzed in Alternative B. Some of the coverage reduction realized with this Alternative C is offset by an annual increase in observer coverage for a greater number of plants that currently have either 30% coverage or no coverage at all.

Based on an average cost of observer coverage to industry of \$270/day, 79% of the cost savings under this alternative would be realized by the 10 plants in Kodiak and Dutch Harbor, which represent 27% of the plants requiring observer coverage. One hundred percent of the cost savings would be realized as a group by the plants that are generally considered 100% plants, since on average, the 30% plants as well as some that currently require no coverage would realize an increase in observer coverage. The 30% plants would see an average increase of 1.2 days per year in their required coverage. Fifteen plants, or 40%, of the plants affected are not currently required to have observer coverage under the monthly observer deployment period, but would see an average increase of 1.9 days in required coverage per plant.

Table 2-7 Observer coverage reduction with weekly reporting thresholds: 100-199 mt - 30% coverage; ≥200 mt - 100% coverage. Based on data from 1996-1998

Plants	Number of Plants	Average Annual Reduction in Observer Days	Percent Annual Reduction in Observer Days	Annual Reduction in Cost [observer days only] (dollars)	Avg Annual Cost Savings Per Plant (dollars)
All	37	451	16.2	121,770	3,291
Kodiak	7	237	18.6	63,990	9,141
Dutch	3	121	17.9	32,670	10,890
100%	18	480	19	129,600	7,200

30%	9	-11	-16	-2,970	-330
0%	15	-28	--	-7,560	-504

As with Alternative B, this alternative could significantly increase the frequency with which new observers are deployed. Based on data from 1996 through 1998, an annual average of 116 monthly observer deployments to all plants occurred. Under this Alternative C, an annual average of 389 weekly observer deployments to all plants would be realized. This is also an increase over the number of weekly deployments required under Alternative B, as a result of the lower landings thresholds that trigger observer coverage.

Estimated Costs to Observer Providers:

Evaluated costs of this alternative to the observer providers are similar to those described under Alternative B, and the increased observer deployments required under this Alternative would result in a greater increase in costs from the current coverage regime than would Alternative B. The greater number of observer deployments over those resulting from Alternative B would mean an even greater increase in deployment logistical problems from those cited for Alternative B.

Estimated Costs to NMFS:

Evaluated costs of this alternative to NMFS are essentially the same as those described under Alternative B. The slight overall increase in observer days compared to Alternative B as described above could result in a slightly lower reduction of biological samples collected as compared to the levels collected under the current monthly deployment regime.

2.2 Shoreside Plant Observer Logistics

2.2.1 Purpose of and Need for the Action

As per regulations at §50 CFR part 679.50 (i) (2) (v) Observer companies are required to provide all logistics to place and maintain observers at the site of a processing facility. This includes all travel arrangements, lodging, per diem, and any other services required to place observers at the processing facility.

Observers have experienced logistical difficulties impeding their ability to be present at a plant to meet groundfish deliveries. These difficulties have been primarily due either to unreliable means of communication resulting in lack of notification by the plant or to unreliable transportation to the plant after being notified of an expected delivery. Observers have reported

missing part or entire deliveries when expected transportation is delayed or does not show up, and have been required to walk or ride a bicycle between one mile and five miles in rain, snow or sub-freezing temperatures when no alternative transportation is available. Plant observer duties include advising vessel observers in plant processing protocol, providing sampling relief to the vessel observer when necessary, verifying deliveries were weighed and the weights accurately recorded, as well as obtaining biological samples from each delivery. When the plant observer is not able to be present during the delivery, errors in sampling by the vessel observer can occur as well as potential loss of prohibited species data for that delivery. Further, the plant observer cannot fulfill other duties as described above, which could lead to further loss of catch data and biological samples.

Observers have also occasionally reported being housed in substandard lodging while deployed at plants. Rooms with leaky ceilings or walls have been reported, as well as rooms located in plants next to loud machinery that operates 24 hours a day, preventing observers from being able to sleep.

The Observer Program has determined that the difficulties described have generally been corrected by observer providers, although these problems could resume at any time. Therefore, it is the intention of the alternatives described below to ensure that such problems as described above will not recur in the future.

2.2.2 Description of the Alternatives

Alternative A

The status quo alternative would maintain current requirements for contractors to provide general logistical support to place and maintain observers at shoreside processing sites. The contractor would not be required to provide the observer with reliable communication equipment or safe, reliable, motorized transportation to the plant, and lodging qualifications would not be specified.

Alternative B

This alternative would amend the observer regulations to require the observer contractor to provide the following logistical support to observers deployed at shoreside plants: clean, dry, quiet housing; reliable communication equipment such as a phone at the observer's accommodations, VHF radio or pager for notification of upcoming deliveries or other necessary

communication, and safe, reliable, motorized transportation to the plant if the observer's accommodations are greater than 1 mile away from the processing facility.

Alternative C

This alternative would amend the observer regulations to require the observer contractor to provide the following logistical support to observers deployed at shoreside plants: reliable communication equipment such as a phone, VHF radio or pager for notification of upcoming deliveries or other necessary communication, and safe, reliable, motorized transportation to the plant if the observer's accommodations are greater than 1 mile away from the processing facility.

2.2.3 Description of fleet, fishery, & industry directly impacted by proposed actions

Table 2-8 Shoreside plants and associated observer coverage levels based on existing regulations - 100% Plants

100% Observer Coverage Plants	Area	Primary Products - 1998
Alaska Pacific Seafoods	Kodiak	Pollock: surimi, fillet; Pcod: fillet
Alyeska Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Arctic Enterprise		Pollock: fillet, fishmeal
Cook Inlet ⁸	Kenai	Pollock: h&g, fillet
Cook Inlet	Kodiak	Pollock: h&g, fillet
Cook Inlet	Seward	Pollock: whole, fillet
Int'l Seafoods ⁹	Shelikof	Pollock: fillet, surimi; Pcod: fillet
King Crab, Inc	King Crab	Pollock: fillet; Pcod: fillet ¹¹
N Pacific Processors ¹⁰	Cordova	Pollock: fillet, roe
Northern Victor		Pollock: fishmeal, fillet
Ocean Beauty	Kodiak	Pollock: fillet; Pcod: fillet
Peter Pan	King Cove	Pcod: fillet, salted; Pollock: fillet
Star of Kodiak	Kodiak	Pollock: fillet, surimi
Trident Seafoods	Akutan	Pollock: surimi, fishmeal, fillet
Trident Seafoods	Sand Point	Pollock: surimi, meal, fillet; Cod fillet
Unisea	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Western Alaska	Kodiak	Pollock: surimi, fillet
Westward Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil

⁸ 1996, 1998

⁹ 1997-98

¹⁰ 1997-98

¹¹ 1997

Table 2-9 Shoreside plants and associated observer coverage levels based on existing regulations - 30% Plants

30% Observer Coverage Plants	Area	Primary Products - 1998
Deep Creek Custom Pack	Homer	Pcod: whole
Great Pacific	Anchorage	Pcod: h&g, fillet
Icicle Seafoods	Seward	Sablefish:h&g;
Int'l Seafoods ¹²	Shelikof	
North Pacific Processors ¹³	Cordova	
Resurrection Bay	Seward	Sablefish:h&g; Pcod:h&g
Sahalee of AK	Anchorage	Sablefish:h&g; Pcod:h&g
Seward Fisheries	Seward	Sablefish:h&g;
Wards Cove	Seward	Pcod:h&g; Sablefish:h&g

2.2.4 Impacts of the Alternatives

Alternative A

Observers have failed to be present at a plant at the time of a delivery because of lack of notification or transportation approximately 6-8 times per year from 1996 to 1998. This has resulted in lost data to NMFS in terms of prohibited species catch accounting and biological samples that would have been collected by the observer for each delivery. Although the species composition of these deliveries is unknown, these missed deliveries represent lost data that would have been used in analyses of stock assessments for various species. There have also been documented errors by vessel observers sampling at plants caused by the plant observer not being present to advise the vessel observer of the plant procedures. The cost of these erroneous or missed sampling episodes is a degradation of the quality and quantity of data available to fisheries managers and scientists that could result in decreased confidence in stock assessments and inaccurate quota or prohibited species catch estimations.

The current regulations regarding observer housing at shoreside processors do not address the quality of that housing, and observers have reported inadequate housing that has prevented them from getting adequate sleep. Unsatisfactory conditions could lead to observers refusing assignments to certain plants or dissuading them from future deployments. This would contribute to a growing concern over observer availability. Furthermore, it

¹² 1996

¹³ 1996

is unreasonable to ask observers, who are performing important monitoring tasks on behalf of the agency, to endure substandard living conditions during their assignments.

The observer providers that supply observers to shoreside processors have indicated that they have corrected the problems associated with a lack of reliable transportation and communication with the plants, as well as the issue of inadequate housing. Further, the Observer Program reports that they have not had complaints from observers about these issues in over a year. Therefore the cost of retaining the status quo alternative may be relatively small, except that the potential exists for such problems to arise in the future.

Alternative B

This alternative would ensure that observers are provided with adequate housing, communications equipment, and transportation to the plant to which they are assigned. Although observer providers have indicated that they have corrected the deficiencies seen in the past, these could arise again in the future if regulations requiring the above standards are not implemented. Under the assumption that each of these specific transportation, communication, and housing concerns have been voluntarily resolved by the industry and/or observer providers, then adoption of this alternative would impose no attributable incremental cost, while also providing the benefits of the regulatory safeguards which would prevent recurrence of these conditions.

Alternative C

This alternative, which would ensure reliable, motorized transportation between an observer's lodging and the plant, does not ensure an adequate quality of housing while assigned to a plant. Adverse implications of the potential for an observer to be housed in substandard lodging are the same as those indicated in Alternative A for this housing quality issue. Unsatisfactory conditions could lead to observers refusing assignments to certain plants or dissuading them from future deployments, contributing to a growing concern over observer availability. A reduction in observer job performance, effectiveness, and morale could lead to a reduction in data quality, as well as observers avoiding plant assignments in general or at specific plants.

2.3 Assignment of Observers to Multiple Shoreside Plants

2.3.1 Purpose of and Need for the Action

Individual plant observers in Kodiak and Dutch Harbor are often assigned to provide coverage for more than one plant in a day. When concurrent deliveries occur at two different plants to which a plant observer is assigned, that observer can meet the delivery and perform required duties at only one plant, leaving the other plant without coverage for that delivery. In Kodiak, there are six plants that share observers and two in Dutch Harbor. Generally, one observer is shared between one plant that requires 100% coverage and one plant that requires 30% coverage. The problem of missed deliveries due to concurrent deliveries at both plants covered by one observer is particularly limited to the pollock fishery and is most acute in Kodiak where vessel observers must often return to sea prior to completing sampling at the plant, leaving the plant observer to complete the sampling for that delivery.

Plant observers also have other duties, such as verifying delivery weights, accounting for prohibited species bycatch, and collecting biological samples from each delivery that are not completed when the observer is not present during the delivery.

This issue is addressed in the implementing regulations for the AFA, which is limited to the BSAI pollock fishery. These regulations require that an inshore processor that takes delivery of or processes pollock must provide a NMFS-certified observer for each 12 hour period of each calendar day during which it takes delivery of or processes groundfish harvested by a vessel engaged in the directed pollock fishery in the BSAI. Plants that take delivery of or process pollock over more than 12 consecutive hours must provide two NMFS-certified observers for each such day. Additionally, the AFA prohibits an observer from covering more than one plant in a day.

It is intention of the alternatives described below to ensure that an observer is available to monitor each delivery at every plant to which they are assigned at the prescribed coverage levels without simultaneous, conflicting duties.

2.3.2 Description of the Alternatives

Alternative A

The status quo alternative would maintain current practice of no restrictions on the number of plants to which an observer may be concurrently assigned.

Alternative B

This alternative would restrict concurrent assignment of an individual observer to shoreside processors during periods of open, directed pollock fishing, such that the observer will not be responsible for coverage in any one day, where a day is a 24 hour period from 0000 hrs A.L.T. - 2400 hrs A.L.T., for more than one shoreside processor which requires observer coverage for any day that the plant receives or processes deliveries. Additionally, in any single contract during open, directed pollock fishing, an observer cannot be assigned to cover concurrently more than: (1) one plant requiring observer coverage during a calendar month for each day it receives or processes groundfish during that month; or (2) two plants, each requiring observer coverage during a calendar month for 30% of the days it receives or processes groundfish during that month.

2.3.3 Description of fleet, fishery, & industry directly impacted by proposed actions

This action would apply to all eighteen "100% coverage" plants that process pollock during the directed pollock fisheries. However, only eight plants - four in Kodiak and two in Dutch Harbor - currently share observers in the manner described above. These eight plants would be the only entities materially affected by this action.

Table 2-10 Shoreside plants and associated observer coverage levels based on existing regulations - 100% Plants

100% Observer Coverage Plants	Area	Primary Products - 1998
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Alaska Pacific Seafoods	Kodiak	Pollock: surimi, fillet; Pcod: fillet
Alyeska Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Arctic Enterprise		Pollock: fillet, fishmeal
Cook Inlet ¹⁴	Kenai	Pollock: h&g, fillet
Cook Inlet	Kodiak	Pollock: h&g, fillet
Cook Inlet	Seward	Pollock: whole, fillet
Int'l Seafoods ¹⁵	Shelikof	Pollock: fillet, surimi; Pcod: fillet
King Crab, Inc	Kodiak	Pollock: fillet; Pcod: fillet ¹⁷
N Pacific Processors ¹⁶	Cordova	Pollock: fillet, roe
Northern Victor		Pollock: fishmeal, fillet
Ocean Beauty	Kodiak	Pollock: fillet; Pcod: fillet
Peter Pan	King Cove	Pcod: fillet, salted; Pollock: fillet
Star of Kodiak	Kodiak	Pollock: fillet, surimi
Trident Seafoods	Akutan	Pollock: surimi, fishmeal, fillet
Trident Seafoods	Sand Point	Pollock: surimi, meal, fillet; Codfillet
Unisea	Dutch Harbor	Pollock: surimi, fishmeal, fish oil
Western Alaska	Kodiak	Pollock: surimi, fillet
Westward Seafoods	Dutch Harbor	Pollock: surimi, fishmeal, fish oil

Table 2-11 Shoreside plants and associated observer coverage levels based on existing regulations - 30% Plants

30% Observer Coverage Plants	Area	Primary Products - 1998
Deep Creek Custom Pack	Homer	Pcod: whole
Great Pacific	Anchorage	Pcod: h&g, fillet
Icicle Seafoods	Seward	Sablefish: h&g;
Int'l Seafoods ¹⁸	Shelikof	
North Pacific Processors ¹⁹	Cordova	
Resurrection Bay	Seward	Sablefish: h&g; Pcod: h&g
Sahalee of AK	Anchorage	Sablefish: h&g; Pcod: h&g
Seward Fisheries	Seward	Sablefish: h&g;
Wards Cove	Seward	Pcod: h&g; Sablefish: h&g

All "100%" and "30%" plants would be regulated by the proposed action, but only the eight "100%" plants indicated in bold in Table 2-10 would be impacted, since those plants currently share observers.

¹⁴ 1996,1998

¹⁵ 1997-98

¹⁶ 1997-98

¹⁷ 1997

¹⁸ 1996

¹⁹ 1996

2.3.4 Impacts of the Alternatives

Alternative A

Under the status quo alternative, NMFS' ability to collect adequate data for the management of the groundfish fisheries, including accounting for prohibited species bycatch, at plants which share observers is in question. Although the frequency with which observers miss deliveries due to concurrent deliveries at two different plants is not great, the potential for missed deliveries to increase at the plants in question if delivery frequencies increase or the practice of sharing observers spreads to other plants exists. Industry could incur costs from the potential mis-allocation of TAC resulting in premature fishery closures due to inaccurate catch accounting.

Alternative B

Under this alternative, plants requiring 100% coverage would incur the entire cost of each observer day they received coverage, rather than splitting this cost with the plant that shared the observer. The observer costs for these 100% plants would, therefore, be roughly double their current costs of coverage, although no higher per coverage day than what the other "100%" plants who do not share an observer. This essentially creates a cost equity for all 100% plants. Two plants requiring 30% coverage in a given month that share an observer would still be able to pay for half of an observer, so no additional costs would be incurred for these plants under this alternative. However, these plants would have to schedule their deliveries in such a way that the two plants do not receive or process deliveries on the same day for every day of the month. There must be sufficient scheduling variation between the two plants to allow each to be observed for the required 30% of total deliveries for each plant. This does not appear to represent a problem, given the ability to communicate via radio with vessels at sea to arrange the delivery schedules.

2.4. Groundfish Pot Fishery Observer Coverage Requirements

2.4.1 Purpose of and Need for the Action

Under current regulations at 50CFR part 679.50(c)(1)(vii) observer coverage is required for vessels equal to or greater than 60 ft LOA fishing with pot gear that participate more than 3 days in a directed fishery for groundfish in a calendar quarter. These vessels are required to carry an observer for 30% of the fishing days in a calendar quarter that pots are used and during at least one entire fishing trip using pot gear in a calendar

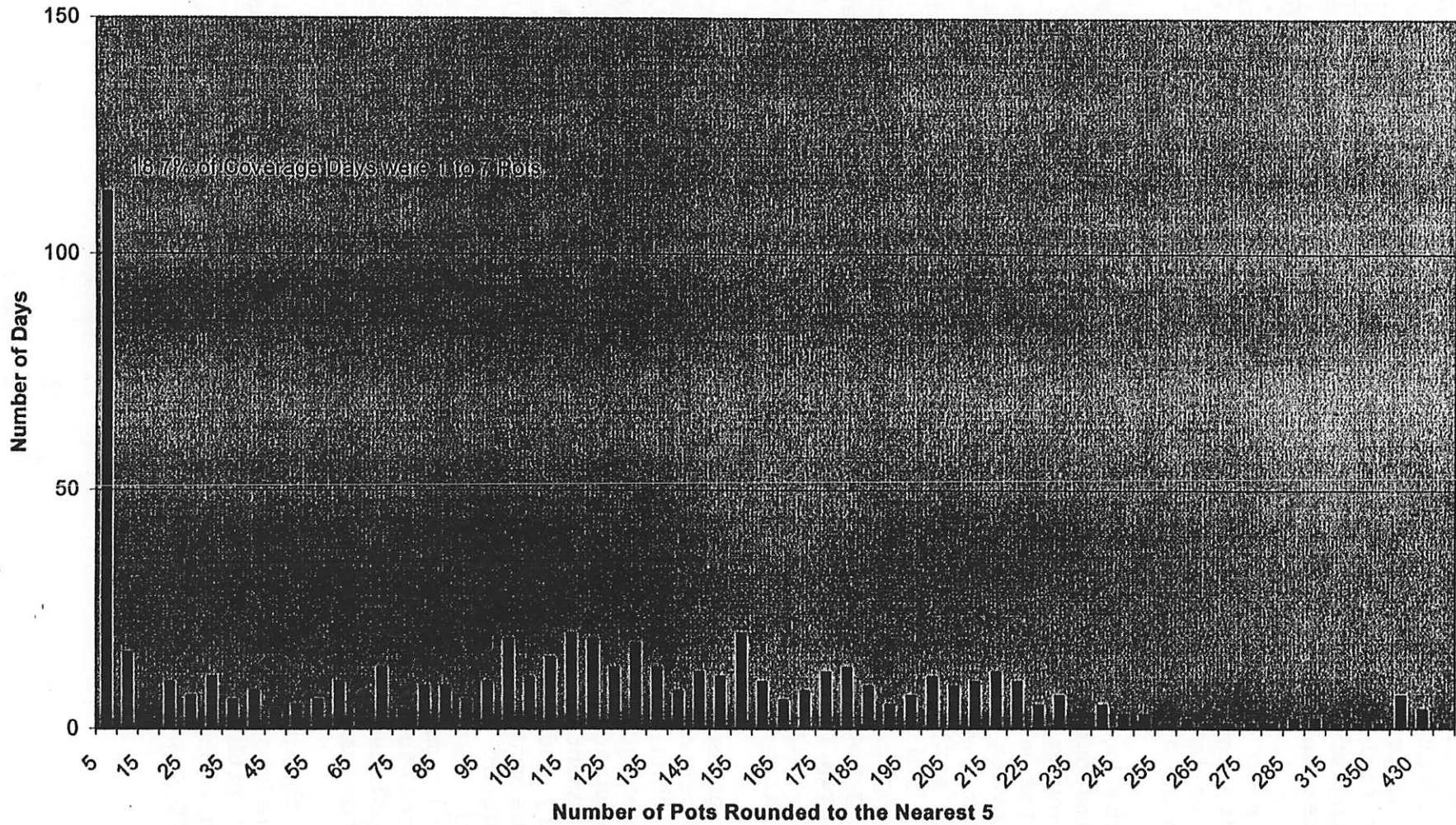
quarter for each groundfish fishery category in which the vessel participates. A fishing day for pot gear is defined as "a 24 hour period from 0001 hours A.L.T. through 2400 hours A.L.T., in which fishing gear is retrieved and groundfish are retained." A fishing trip for pot gear is defined in the following way: "For a catcher vessel used to deliver to other than a mothership, the time period during which one or more fishing days occur, that starts on the day when fishing gear is first deployed and ends on the day the vessel offloads groundfish, returns to an Alaskan port or leaves the EEZ off Alaska and adjacent waters of the State of Alaska."

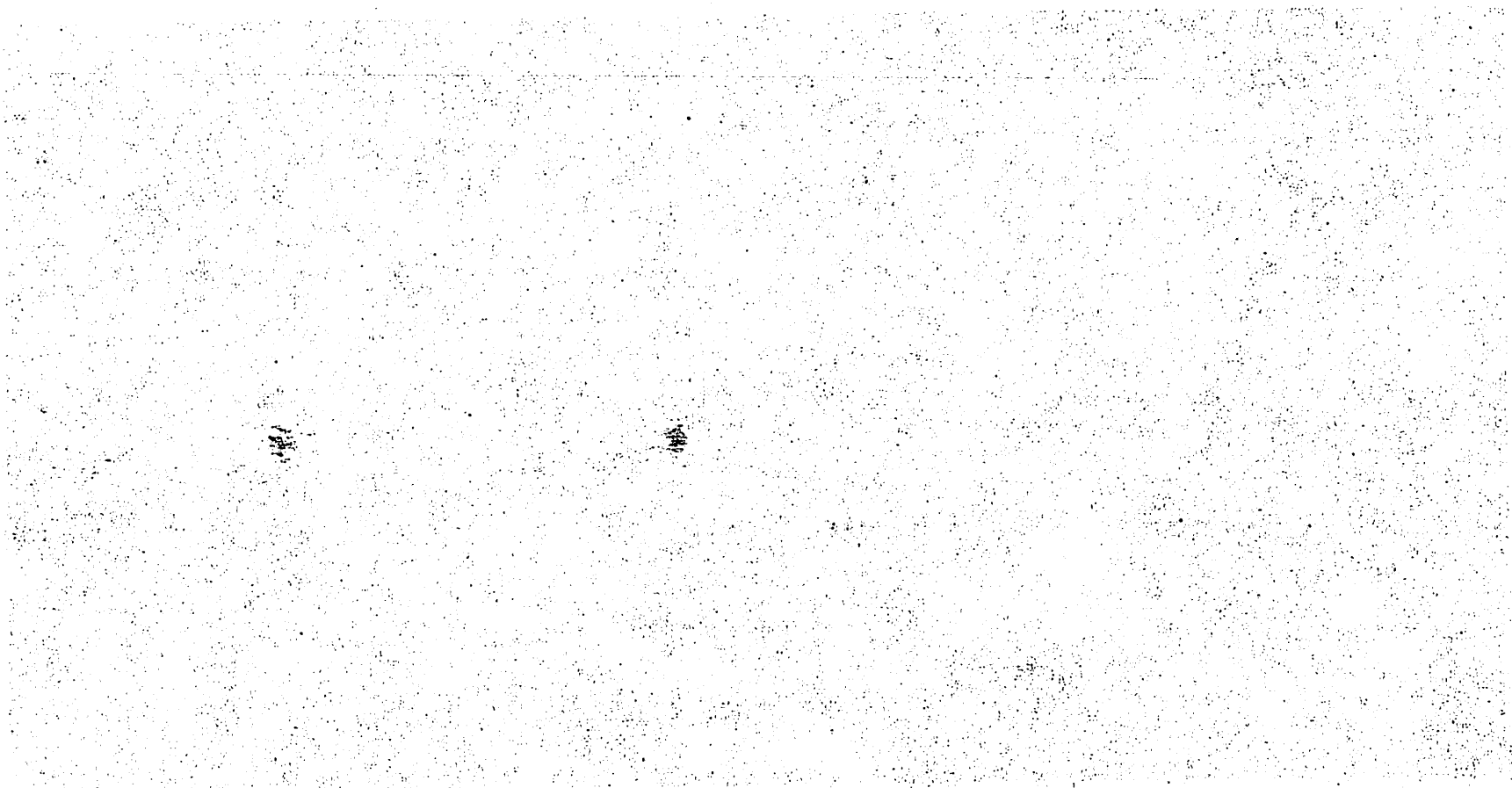
Reports have been filed since 1996 by observers documenting circumstances where vessel operators indicated that they were retrieving only one pot while the observer was aboard simply to meet the minimum coverage requirement. In 1998 alone over 160 retrievals were made of one pot/day or trip (see Figures 2-2 through 2-4). These pots have often been set right off the vessel sitting at the dock or up to a 30 minute steam from the dock. While this technically satisfies the coverage requirements, it is not considered within the range of the normal fishing activity. This precludes the opportunity in these instances to monitor fishing practices, catch rates and discards for in-season management, nor does it allow for collection of critical biological data, used in stock assessments.

It is understood that occasions may arise when a trip may be foreshortened or the number of sets retrieved in a day may be fewer than normal, but a deliberate effort to reduce effort when an observer is aboard results in observed fishing days not being representative of fishing effort as intended. Observer coverage requirements are designed to capture unbiased data for a given fishery under normal fishing conditions. Overall observer data for the groundfish pot fishery from 1998-1999 indicate that an average of 123 pots were retrieved per day when an observer was aboard. Observer coverage of fishing days with significantly reduced numbers of gear retrievals results in far less observer data collected relative to actual fishing effort. When extrapolated to the level of the fleet, these observer data take on a far greater significance than they are designed to do.

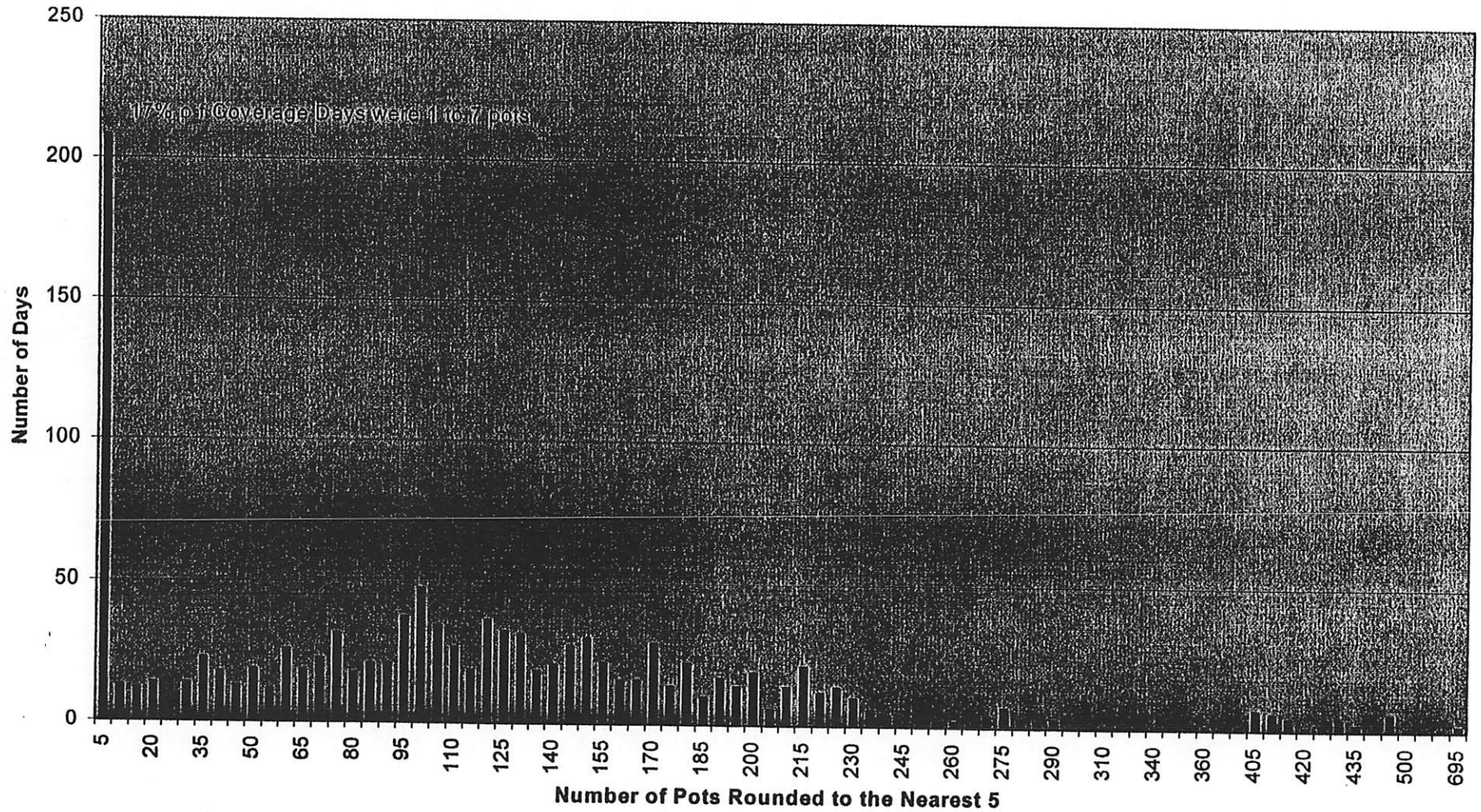
It is the intention of the alternatives described below to achieve observer coverage which reflects the actual fishing effort within this fishery, so that information received by in-season managers, which is based on observer data can accurately reflect catch levels.

Number of Pots Observed Per Day 2000 (Preliminary)

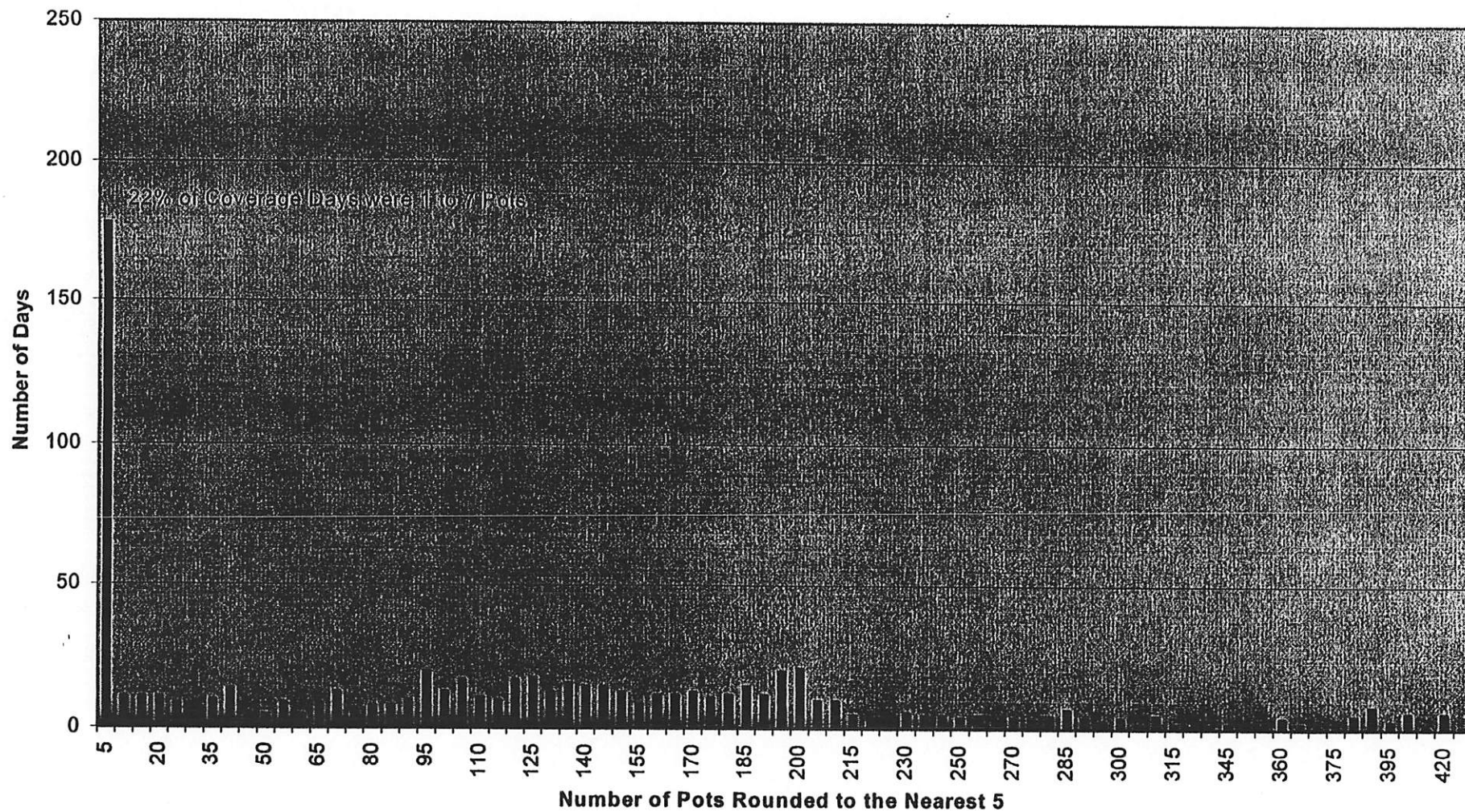




Number of Pots Observed Per Day 1999



Number of Pots Observed Per Day 1998



2.4.2 Description of the Alternatives

Alternative A

The status quo alternative would maintain current observer coverage requirements for vessels equal to or greater than 60 ft LOA fishing with pot gear that participate more than 3 days in a directed fishery for groundfish in a calendar quarter to carry an observer at least 30 percent of their fishing days, as defined above, while using pot gear in that calendar quarter, and during at least one entire fishing trip using pot gear in a calendar quarter for each fisheries category in which the vessel participates.

Alternative B

This alternative would amend observer coverage requirements for a vessel equal to or greater than 60 ft LOA fishing with pot gear that participates more than 3 days in a directed fishery for groundfish in a calendar quarter so that such a vessel must have an observer aboard during at least 30 percent of the total pot retrievals by that vessel in that calendar quarter, rather than for 30 percent of its fishing days in that calendar quarter. Groundfish would still be required to be retained each day the observer is on board and gear is retrieved.

Alternative C

This alternative would amend the definition of a fishing day for pot vessels, for purposes of observer coverage, as a 24 hour period from 0001 hrs A.L.T. - 2400 hrs A.L.T. during which at least 12 sets are retrieved and groundfish are retained.

Alternative D

This alternative would amend the observer coverage requirements for all vessels equal to or greater than 60 ft LOA fishing with pot gear that participates more than 3 days in a directed fishery for groundfish in a calendar quarter while using pot gear to require the vessel to carry an observer each day it fishes with pot gear during a calendar quarter.

2.4.3 Description of fleet, fishery, & industry directly impacted by proposed actions

Table 2-12 Groundfish Pot fleet required to carry observers during at least 30% of fishing days with pot gear

Fishery	Fleet Sector	Category	Observer Coverage Requirement	Number
Groundfish Pot Fishery	catcher processors	60 to 124 ft	30%	2
		125 ft and up	100%	6
	catcher vessels	60 to 124 ft	30%	75
		125 ft and up	100%	23

Approximately 241 vessels participated in this fishery at any time between 1995 and 1998. Eighty-nine pot catcher vessels participated in this fishery in the Bering Sea in 1998, with the remainder fishing in the Gulf of Alaska. Eight catcher/processors participated in this fishery with seven in the Bering Sea and one in the Gulf of Alaska. The pot fleet, in most cases, earns most of their revenues in the crab fisheries, but supplements that income with revenues from cod.

2.4.4 Impacts of the Alternatives

Alternative A

With pot vessels circumventing the intent of the coverage level requirements, NMFS' ability to collect adequate data for the management of this fishery is compromised under the status quo alternative. The increasing frequency with which observer coverage falls short of reflecting actual fishing effort results in biased data used for estimating prohibited species bycatch, discard rates and total catch. Inaccurate catch accounting may result in fisheries closures occurring before allocations are reached or after quotas are exceeded.

Valuable catch may be forfeited when fisheries are closed prior to allocations being reached, with adverse economic consequences accruing to both operators who engage in undesirable observer coverage practices and those who do not. Thus, the behavior of a subset of operators could impose direct and significant costs on others in the form of lost fishing time and revenues that could not be recovered. Premature closures due to incomplete or inaccurate catch data attributable to these same undesirable practices could adversely impact product supply and prices paid by consumers.

In the second instance in which closure of the fishery is inappropriately delayed because of this strategic "distortion" of

observer coverage, fishery resources may be less efficiently and effectively managed, with adverse longer term implications for productivity and future catch levels. These effects may extend, not only to those fishing groundfish with pots, but also to fishermen employing other gear types to harvest the same species, as well as to users in non-groundfish species which are designated as "prohibited" bycatch in the pot fisheries. While these costs cannot be readily estimated, they do represent a real potential loss associated with this behavior.

Table 2-13 Estimated Observer Coverage Costs for Cod Pot Fishery - 1998

Vessel Category	Observer Coverage Category	Weeks Fishing	Observer Coverage Costs [observer days only] (dollars)	Average Observer Cost per Vessel [observer days only] (dollars)
Catcher Vessel	30%	456	36,936 - 258,552	492 - 3,447
	100%	59	15,930 - 111,510	692 - 4,848
Catcher/Processor	30%	29	2,349 - 16,443	1,174 - 8,221
	100%	28	7,560 - 52,920	1,260 - 8,820

For all vessels in this fishery, the total days covered for 1998 was 809 days, and 1250 days for 1999. This information is not available for each coverage category. The average cost of observer coverage per year for the entire fishery for these years is \$218,430, or \$2,060 per vessel. To place this cost in context, the average gross earnings for groundfish pot operators in these years were approximately \$13.5 million per year. Observer costs were approximately 1.6% of the gross revenues for this fishery for 1998 - 1999.

Alternative B

This alternative, in which coverage levels are based on a percentage of gear retrieved, provides an incentive for vessels to maximize fishing effort while carrying an observer aboard. The more gear a vessel retrieves while an observer is onboard, for the sooner coverage requirements will be met for that quarter. Meeting coverage requirements with fewer observer days would reduce observer costs to the vessel.

This alternative would benefit NMFS by enhancing its ability to obtain observer data that reflects a known portion of actual fishing effort.

Alternative C

This alternative would require applying a minimum fishing effort to each day an observer was aboard in order for that day to count toward coverage requirements. The current average pot retrievals per day is 123. However, variations occur from this averages for a variety of reasons, including, but not limited to weather, vessel and gear breakdowns, crew illness or injury, and others. Setting a minimum limit on gear retrievals to validate an observer day, even if that limit is based on lower levels than currently occur, could unfairly constrain fishing practices, possibly endangering the vessel and crew. This could also result in added costs to the vessel for each day that it carried an observer, but could not meet the daily minimum gear retrieval limit for legitimate reasons. The actual burden this might represent is questionable, however, since this provision applies to vessels which are currently only required to carry observers for 30% of their fishing time. Nonetheless, Alternative C has the potential to impose somewhat greater costs, as identified above, on effected operators than Alternative B, while producing approximately the same results in terms of observer coverage.

Alternative D

Although this alternative would ensure that adequate levels observer data were collected in this fishery, this level of data is not necessary for scientific or management purposes. Additional costs would be realized by those vessels currently required to carry observers for 30% of the days they retrieve pot gear and retain groundfish, and would be 3.3 times the costs currently incurred, since they would be required to carry observers 100% of the time they were fishing with pot gear. In addition, it would contribute to inefficient use of the limited number of observers available for coverage in all fisheries, reducing available observers for fisheries where coverage needs are greater.

Table 2-14 Estimated Average Observer Cost per "30%" Vessel with increase to 100% coverage

Vessel Category	Current Observer Coverage Category	Weeks Fishing	Estimated Average Observer Cost per Vessel with 100% coverage [observer days only] (dollars)
Catcher Vessel	30%	456	1,623 - 11,375
Catcher/Processor	30%	29	3,874 - 27,129

2.5 Confidentiality of Observer Personal Information

2.5.1 Purpose of and Need for the Action

Observers have reported since 1991 that resumes containing employment histories, home addresses and phone numbers, as well as past observer deployment evaluations have been forwarded to fishing companies by the observer contractors without the observer's permission. This personal information was often forwarded on to individual vessels aboard which the observer was deployed.

The potential for misuse and abuse of this personal information is clear. Overt intimidation of observers is the primary concern. Observers have reported that such personal information has been referred to by vessel personnel during discussions of potential violations raised by the observer. The manner in which the information has been brought up has been interpreted by some observers as implying repercussions would be forthcoming, or that questions are being raised concerning an observer's qualifications. This type of direct or implied intimidation can result in observers, particularly those less experienced, declining to report potential violations witnessed during a deployment, thus undermining their effectiveness in monitoring fisheries activities and practices.

In 1996, observers collectively asked both NMFS and the Association of Professional Observers (APO) to request that contractors cease this practice. Upon such request by NMFS and the APO, contractors verbally agreed to stop forwarding personal information about observers to industry. However, there is still concern on the part of observers and NMFS that this practice continues or could occur, on occasion, at some time in the future, absent a strict formal prohibition.

The intention of this proposed action is to ensure that such personal information about observers remains confidential and is not distributed to the fishing industry by observer providers who hire and deploy observers to industry.

2.5.2 Description of the Alternatives

Alternative A

The status quo alternative would maintain current NMFS policy requesting that observer contractors refrain from distributing personal information about observers, such as resumes, observer evaluations and deployment ratings, to industry, but would not include as regulation.

Alternative B

This alternative would amend regulations to prohibit observer contractors from distributing personal information, such as observers' resumes, observer evaluations and deployment ratings, home addresses and phone numbers to industry.

2.5.3 Description of fleet, fishery, & industry directly impacted by proposed actions

All six observer companies described in Section 2.0 would be impacted by this proposed action, since the regulations would specifically apply to them. However, the companies maintain that this practice is not part of their standard operating procedure and currently does not occur.

2.5.4 Impacts of the Alternatives

Alternative A

Retention of the status quo alternative could jeopardize NMFS' ability to collect scientific data and monitor the prosecution of these groundfish fisheries covered by observers (including information on potential violations), due to the potential for intimidation of observers through the means described above. Additionally, the potential for unfavorable or hostile working conditions for observers could continue, contributing to factors that may persuade observers to choose not to continue in this job. This could exacerbate the current problem of attracting and retaining sufficient numbers of qualified observers to meet the demand in these fisheries. If insufficient numbers of observers can be obtained to cover fishing operations, either, 1) some operators will not be able to participate in the fishery, with all that may imply for losses of revenue, idleness of vessels and crew, risk of loss of investment, etc., or 2) observer coverage requirements would have to be reduced, resulting in a loss of scientific and management data, with all the inefficiencies cited earlier resulting from premature closures or over fishing quotas.

Alternative B

This alternative would benefit NMFS and the Alaska fishing industry with an increased confidence in observers' ability and willingness to collect and report required data, including information on potential violations, without fear of having personal information, supplied by the contracting firm, used by vessel or plant personnel as a means of intimidation. This would be expected to result in better overall management of the North Pacific groundfish fisheries, and avoidance of the potential

costs associated with retention of the status quo alternative, cited above. There are no direct or immediate fiscal costs associated with adoption of this alternative, especially since all regulated firms assure NMFS that they have already voluntarily ceased this practice.

3.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS

The Regulatory Flexibility Act (RFA), first enacted in 1980, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a federal regulation. Major goals of the RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business, (2) to require that agencies communicate and explain their findings to the public, and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities. The RFA emphasizes predicting impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts while still achieving the stated objective of the action.

On March 29, 1996, President Clinton signed the Small Business Regulatory Enforcement Fairness Act. Among other things, the new law amended the RFA to allow judicial review of an agency's compliance with the RFA. The 1996 amendments also updated the requirements for a final regulatory flexibility analysis, including a description of the steps an agency must take to minimize the significant economic impact on small entities. Finally, the 1996 amendments expanded the authority of the Chief Counsel for Advocacy of the Small Business Administration (SBA) to file *amicus* briefs in court proceedings involving an agency's violation of the RFA.

In determining the scope, or 'universe', of the entities to be considered in an IRFA, NMFS generally includes only those entities, both large and small, that can reasonably be expected to be directly or indirectly affected by the proposed action. If the effects of the rule fall primarily on a distinct segment, or portion thereof, of the industry (e.g., user group, gear type, geographic area), that segment would be considered the universe for the purpose of this analysis. NMFS interprets the intent of the RFA to address negative economic impacts, not beneficial impacts, and thus such a focus exists in analyses that are design to address RFA compliance.

To ensure a broad consideration of impacts and alternatives, NMFS has prepared an IRFA pursuant to 5 USC 603, without first making the threshold determination of whether or not this proposed action would have a significant economic impact on small entities. An Initial Regulatory Flexibility Analysis is

conducted below to comply with the RFA. Under 5 U.S.C., Section 603 (b) of the RFA, each IRFA is required to contain:

5. A description of the reasons why action by the agency is being considered;
6. A succinct statement of the objectives of, and the legal basis for, the proposed rule;
7. A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);
8. A description of the projected reporting, record keeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
9. An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule;
10. A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:
 1. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
 2. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
 3. The use of performance rather than design standards;
 4. An exemption from coverage of the rule, or any part thereof, for such small entities.

What is a Small Business?

Small businesses. Section 601(3) of the RFA defines a 'small business' as having the same meaning as 'small business concern' which is defined under Section 3 of the Small Business Act. 'Small business' or 'small business concern' includes any firm that is independently owned and operated and not dominate in its field of operation. The SBA has further defined a "small business concern" as one "organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor...A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture."

The SBA has established size criteria for all major industry sectors in the US including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of \$ 3 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$3 million criterion for fish harvesting operations. Finally a wholesale business servicing the fishing industry is a small businesses if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established "principles of affiliation" to determine whether a business concern is "independently owned and operated." In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists.

Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50% or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50% of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

The North Pacific Fisheries Management Council has requested that NMFS analyze alternatives to respond to five areas of concern that the Council believes detract from the overall achievement of the goals of the Observer Program. These issues are separate such that proposed changes for one issue will not affect the other issues. Each issue is therefore treated separately in this

analysis.

The areas addressed in this analysis are as follows: (1) Shoreside plant observer coverage - monthly projections of delivery weights which trigger observer coverage may result in unnecessary observer coverage during periods during the month when relatively reduced deliveries are processed; (2) Shoreside plant observer logistics - observers occasionally miss observing deliveries to shoreside plants due to unreliable communication with the plant or unreliable transportation to the plant. Additionally, occasional inadequate housing for observers assigned to plants is experienced; (3) Concurrent assignment of observers to multiple shoreside plants - observers occasionally miss deliveries to shoreside plants due to concurrent assignment to two plants receiving deliveries simultaneously; (4) Groundfish pot fishery observer coverage requirements - observer coverage does not accurately reflect fishing effort in the groundfish pot fishery due to vessels that purposely retrieve only one pot per day an observer is aboard; and (5) Confidentiality of observer personal information - personal information about observers occasionally distributed to industry by contractors has been used to intimidate observers at sea.

3.1 Analysis of Each Proposed Action and Associated Alternatives

3.1.1 Shoreside plant Observer Logistics

3.1.1.1 A description of the reasons why action by the agency is being considered:

Current regulations at §50 CFR part 679.50(d) require each shoreside processor to project for each calendar month the amount, in metric tons, of groundfish that is expected to be received or processed at that facility. Observer coverage requirements for each month are based on those projections and can result in observer coverage during times when relatively little groundfish is received by some plants. A request from some segments of the industry has been made for some relief from observer coverage during these periods of reduced landings. For a complete description of the purposes for this proposed action refer to Section 2.1, pages 13 through 25 of the RIR.

3.1.1.2 A succinct statement of the objectives of, and the legal basis for, the proposed rule:

Under the statutory authority of the Magnuson-Stevens Act, NMFS, Alaska Region proposes to amend regulations that determine the

levels of required observer coverage at shoreside processing facilities that receive or process groundfish from the North Pacific Groundfish fisheries. It is the intention of the proposed alternatives to respond to the request by some shoreside processors that they be allowed to make weekly, rather than monthly, projections which would trigger observer coverage for the week at specified thresholds. In this way, these plants would anticipate a costs savings by reducing the number of observer days required.

3.1.1.3 A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply:

Under the definition of small entity for the fisheries harvesting and processing industry, several of the shoreside processors impacted by this action are considered to be small entities. Nineteen shoreside processors that would be impacted by this proposed action would be considered small entities with fewer than 500 employees. The remaining 18 shoreside processors would be considered large entities, processing the vast majority of the shoreside landings in 1998.

Additionally, the six observer provider companies that are certified by NMFS to supply observers to the fishing industry through direct procurement are considered small entities. For the past several years there have been five primary observer providers, with a sixth added in 1999. That firm, a Canadian company that has supplied observers to Canadian fisheries, has not begun to supply observers to the North Pacific groundfish fleet. These companies are small, employing between 2 and 10 employees, although one firm is owned by a larger company, that has interests other than observer provision. Staff are responsible for recruiting and hiring qualified observers, providing observers as requested to industry, providing all logistics to place and maintain observers aboard fishing vessels or at plant sites (including travel, lodging and other services necessary), ensuring that all data, samples and reports are submitted to NMFS and debriefings are completed in a timely manner, and adhering to all applicable regulations and policies covering the deployment of observers and required reports. The firms are located in Alaska, Washington, Oregon and Nova Scotia, Canada.

Communities that are home to the shorebased processors that would be impacted by this rule in the Bering Sea are Dutch Harbor, Akutan, King Cove, Sand Point and Adak. Communities that are home to the shorebased processors that would be impacted by this

rule in the Gulf of Alaska are Kodiak, Anchorage, Kenai, Seward, Shelikof, Cordova, Homer, Petersburg, Kake, Sitka, Yakutat, and Juneau. With the exception of Anchorage, all of these communities qualify as "small jurisdictions", under RFA definitions. None is directly regulated by the proposed action, and there are no anticipated indirect effects associated the proposed action which would accrue to this group of "small entities".

3.1.1.4 A description of the projected reporting, record keeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

There are no reporting, record keeping or other compliance requirements of the proposed action that are additional to the requirements under the current regulations that this action is intended to amend.

3.1.1.5 An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

This analysis did not reveal any federal rules that duplicate, overlap or conflict with the proposed action.

3.1.1.6 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities:

For a detailed assessment of each alternative, please refer above to Section 2.1.4, pages 18 through 26 of the RIR. As described in the alternatives above, Alternative A provides the least impact on small entities of the three alternatives presented.

3.1.2. Shoreside Plant Observer Logistics

3.1.2.1. A description of the reasons why action by the agency is being considered:

Observer companies are required to provide all logistics to place and maintain observers at the site of a processing facility. This includes all travel arrangements, lodging, per diem, and any

other services required to place observers at the processing facility. A complete and detailed treatment of the reasons why the agency is proposing to undertake this action is contained in Section 2.2, pages 26 through 30 of the RIR.

3.1.2.2 A succinct statement of the objectives of, and the legal basis for, the proposed rule:

Under the statutory authority of the Magnuson-Stevens Act, NMFS, Alaska Region proposes to amend regulations that require observer providers to provide all logistics necessary to place and maintain observers at the site of a shoreside processing facility to which they are assigned to ensure that observers have clean, dry, quiet housing and reliable equipment for communication with the plant and reliable, motorized transportation to the plant if the plant is greater than one mile from the lodging. The Observer Program has determined that the difficulties described have generally been corrected by observer providers, although these problems could resume at any time. Therefore, it is the intention of the proposed alternatives to ensure that such problems as described above will not recur in the future.

3.1.2.3 A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate):

Under the definition of small entity for the fisheries harvesting and processing industry, none of the fisheries industry impacted by this action are considered to be small entities. However, the six observer provider companies that are certified by NMFS to supply observers to the fishing industry through direct procurement are considered small entities. For the past several years there have been five primary observer providers, with a sixth added in 1999. That firm, a Canadian company that has supplied observers to Canadian fisheries, has not begun to supply observers to the North Pacific groundfish fleet. These companies are small, employing between 2 and 10 employees, although one firm is owned by a larger company, that has interests other than observer provision, although information is not available on this firm to establish whether it is a small entity. Observer Company staff are responsible for recruiting and hiring qualified observers, providing observers as requested to industry, providing all logistics to place and maintain observers aboard fishing vessels or at plant sites (including travel, lodging and other services necessary), ensuring that all data, samples and reports are submitted to NMFS and debriefings are completed in a timely manner, and adhering to all applicable regulations and

policies covering the deployment of observers and required reports. The firms are located in Alaska, Washington, Oregon and Nova Scotia, Canada.

3.1.2.4 A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

There are no reporting or record keeping requirements of the proposed action that are additional to the requirements under the current regulations that this action is intended to amend. While current regulations require observer providers, or contractors, to provide all logistics necessary to place observers at the site of an assigned shoreside processor including travel, lodging and "any other services" required, these requirements are not specific. Proposed additional compliance requirements include requiring observer providers, or contractors, to provide clean, dry, quiet housing; reliable communication equipment such as a phone at the observer's accommodations, VHF radio or pager for notification of upcoming deliveries or other necessary communication, and safe, reliable, motorized transportation to the plant if the observer's accommodations are greater than 1 mile away from the processing facility. Professional skills required by observer provider company staff would not exceed those already required for current provision of logistics, such as the ability to communicate effectively, make plane reservations, and schedule observers according to the sometimes complex logistical needs of the fishing industry.

3.1.2.5 An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

This analysis did not reveal any federal rules that duplicate, overlap or conflict with the proposed action.

3.1.2.6 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities:

For a detailed assessment of each alternative, please refer above

to Section 2.2.4, pages 29 through 30 of the RIR. As described above, all three alternatives present minimal impact on small entities.

3.1.3. Concurrent assignment of observers to multiple shoreside plants

3.1.3.1 A description of the reasons why action by the agency is being considered:

Individual plant observers in Kodiak and Dutch Harbor are often assigned to provide coverage for more than one plant in a day. When concurrent deliveries occur at two different plants to which a plant observer is assigned, that observer can meet the delivery and perform required duties at only one plant, leaving the other plant without coverage for that delivery. A complete and detailed treatment of the reasons why the agency is proposing to undertake this action is contained in Section 2.3, pages 30 through 34 of the RIR.

3.1.3.2 A succinct statement of the objectives of, and the legal basis for, the proposed rule:

Under the statutory authority of the Magnuson-Stevens Act, NMFS, Alaska Region proposes to amend regulations that require observer coverage at shoreside processing facilities to ensure that during directed pollock fishing from those plants that receive or process pollock, an observer cannot provide coverage for more than one plant in any given day, and cannot provide coverage during one contract for more than one plant which requires coverage for each day it receives or processes groundfish or more than two plants that each require coverage for 30% of the days that it receives or processes groundfish. It is intention of the proposed alternatives to ensure that an observer is available to monitor each delivery at every plant to which they are assigned at the prescribed coverage levels without simultaneous, conflicting duties.

3.1.3.3 A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate):

Under the definition of small entity for the fisheries harvesting and processing industry, none of the shoreside processors impacted by this action are considered to be small entities.

- 3.1.3.4** A description of the projected reporting, record keeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

There are no reporting or recordkeeping or other compliance requirements of the proposed action that are in addition to the requirements under the current regulations that this action is intended to amend.

- 3.1.3.5** An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

This analysis did not reveal any federal rules that duplicate, overlap or conflict with the proposed action.

- 3.1.3.6** A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities:

For a detailed assessment of each alternative, please refer above to Section 2.3.4, page 34 of the RIR. As described above, Alternative A, the status quo alternative, presents the least impact on small entities.

3.1.4. Groundfish pot fishery observer coverage requirements

- 3.1.4.1** A description of the reasons why action by the agency is being considered:

Regulations specify observer coverage requirements for vessels fishing with pot gear. However, numerous observer reports since at least 1996 indicate a common practice of reducing fishing effort while an observer is aboard. A complete and detailed treatment of the reasons why the agency is proposing to undertake this action is contained in Section 2.4, pages 34 through 44 of the RIR.

- 3.1.4.2** A succinct statement of the objectives of, and the legal basis for, the proposed rule:

Under the statutory authority of the Magnuson-Stevens Act, NMFS,

Alaska Region proposes to amend regulations that require observer coverage for vessels that participate in the groundfish pot fisheries from basing the coverage requirements on 30% of the days fished in a quarter for each groundfish category the vessel participates in for that quarter to basing the requirements on 30% of the gear retrieved in a quarter for each groundfish category the vessel participates in for that quarter. It is the intention of the proposed alternatives to achieve observer coverage which reflects the actual fishing effort within this fishery, so that information received by in-season managers, which is based on observer data can accurately reflect catch levels.

3.1.4.3 A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate):

North Pacific Groundfish Pot Fishery with Observer Coverage Requirements - Bering Sea and Gulf of Alaska

Fishery	Entity	Category	Number
Groundfish Pot Fishery	catcher	60 to 124 ft	2
	processors	125 ft and up	6
--			
Bering Sea and Gulf of Alaska	catcher vessels	60 to 124 ft	75
		125 ft and up	23

For purposes of the IRFA, this analysis incorporates by reference the IRFA prepared for the Pacific Cod License Limitation Program - Amendment 67 to the Bering Sea FMP. This analysis concluded that almost all of the pot catcher vessels that fish for Pacific cod in the Bering Sea can be considered small businesses, with annual receipts of less than \$3 million. Eighty-nine pot catcher vessels participated in this fishery in the Bering Sea in 1998, with the remainder fishing in the Gulf of Alaska. An unknown number of the eight catcher/processors that participated in this fishery (seven in the Bering Sea and one in the Gulf of Alaska) would be considered small entities. The pot fleet, in most cases earns most of their revenues in the crab fisheries, but supplements that income with revenues from cod.

3.1.4.4 A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule,

including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

There are no reporting, recordkeeping or other compliance requirements of the proposed action that are in addition to requirements under the current regulations that this action is intended to amend.

3.1.4.5 An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

This analysis did not reveal any federal rules that duplicate, overlap or conflict with the proposed action.

3.1.4.6 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities:

For a detailed assessment of each alternative, please refer above to Section 2.4.4, pages 42 through 44 of the RIR. As described above, Alternative B presents the least impact on small entities.

3.1.5. Confidentiality of Observer Personal Information

3.1.5.1 A description of the reasons why action by the agency is being considered:

Observers have reported since 1991 that resumes containing employment histories, home addresses and phone numbers, as well as past observer deployment evaluations have been forwarded to fishing companies by the observer contractors without the observer's permission. The potential intimidation of observers is the primary concern regarding the distribution of this personal information. A complete and detailed treatment of the reasons why the agency is proposing to undertake this action is contained in Section 2.5, pages 44 through 47 of the RIR.

3.1.5.2 A succinct statement of the objectives of, and the legal basis for, the proposed rule:

Under the statutory authority of the Magnuson-Stevens Act, NMFS, Alaska Region proposes to amend regulations that designate

parameters of certification and decertification of observer contractors, or providers so that it is prohibited for a certified contractors to distribute personal information of observers to industry or any entity other than the federal government. The intention of this proposed action is to ensure that such personal information about observers remains confidential and is not distributed to the fishing industry by observer providers who hire and deploy observers to industry.

3.1.5.3 A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate):

The six observer provider companies that are certified by NMFS to supply observers to the fishing industry through direct procurement are considered small entities. For the past several years there have been five primary observer providers, with a sixth added in 1999. That firm, a Canadian company that has supplied observers to Canadian fisheries, has not begun to supply observers to the North Pacific groundfish fleet. These companies are small, employing between 2 and 10 employees, although one firm is owned by a larger company, that has interests other than observer provision. Staff are responsible for recruiting and hiring qualified observers, providing observers as requested to industry, providing all logistics to place and maintain observers aboard fishing vessels or at plant sites (including travel, lodging and other services necessary), ensuring that all data, samples and reports are submitted to NMFS and debriefings are completed in a timely manner, and adhering to all applicable regulations and policies covering the deployment of observers and required reports. The firms are located in Alaska, Washington, Oregon and Nova Scotia, Canada.

3.1.5.4 A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record:

There are no reporting, recordkeeping or other compliance requirements of the proposed action that are additional to the requirements under the current regulations that this action is intended to amend.

3.1.5.5 An identification, to the extent practicable, of all

relevant Federal rules that may duplicate, overlap or conflict with the proposed rule:

This analysis did not reveal any Federal rules that duplicate, overlap or conflict with the proposed action.

3.1.5.6 A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities.

For a detailed assessment of each alternative, please refer above to Section 2.5.4, pages 46 through 47 of the RIR.

4.0 SUMMARY AND CONCLUSIONS

On the basis of the available data and foregoing analysis, none of the proposed alternatives have the potential to result in outcomes which would be deemed to be "significant", as that term is defined within E.O.12866.

Similarly, none of the proposed actions (alternatives or options) are expected to result in "a significant adverse impact on a substantial number of small entities", as those terms are defined within the Regulatory Flexibility Act (and the Small Business Administration's RFA Guidelines). However, insufficient empirical data are available on cost structure, net revenues, ownership and affiliation of potentially impacted operations to permit the development of a "factual basis" upon which to certify this outcome (as required by the RFA). Therefore, an Initial Regulatory Impact Analysis has been included, herein.

5.0 REFERENCES

National Marine Fisheries Service, 1998. EA/RIR/FRFA To Extend Beyond 1998 the Interim Groundfish Observer Program for the Gulf of Alaska and the Bering Sea and Aleutian Islands, NMFS, September 1998

National Marine Fisheries Service, 1996. EA/RIR/FRFA for Amendment 47 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area and Amendment 47 to the Fishery Management Plan for Groundfish of the Gulf of Alaska and Amendment 6 to the Fishery Management Plan for the Commercial King and Tanner Crab Fisheries in the Bering Sea and Aleutian Islands Area to Implement a North Pacific Groundfish Observer Program to Replace the North Pacific Fisheries Research Plan, NMFS, August 1996.

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C-2

Comments on: "Comments on ... 'A rebuilding plan for the Bering Sea C. opilio stock', Dr. R. Hilborn, 2 April 2000"

Prepared by:
Douglas Pengilly
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8 April 2000

Dr. Hilborn argues that fishery management guidelines established for finfish fisheries may not be optimum in application to crab fisheries. That argument may have merit because, unlike finfish fisheries, females are not typically harvested in crab fisheries and minimum size limits are established for male crabs that are typically greater than their size-at-maturity. In particular, Tanner crabs are also distinguished from finfish by such characteristics as skip sperm storage by females and (or possibly terminal) molting.

On the other hand, Dr. Hilborn's comments and conclusions on the eastern Bering Sea opilio fishery and the current status of the opilio stock are based either on errors or without any substantiating information at all. Additionally, Dr. Hilborn misrepresents the "word and intent" of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) relative to preventing overfishing and achieving optimum yield.

I've divided my comments on Dr. Hilborn's comments into "Errors" and "Unsubstantiated Comments", below.

Errors:

Sex-ratio graph (page 2)

- Graph on sex ratio is based on misreading of NMFS AFSC Processed Report 2000-01 Table 5 ("large" and "very large" males are mistakenly added together), so the ratios are wrong.
- Interpretation problems remain even if Table 5 had been read correctly:
 - Effects of survey catchability by size and geographic distribution?
 - Look at ratio based on maturity status rather than size? Gives a different picture than ratios based on size.
 - Should shell age be factored in? What would be the most meaningful ratio?

"Any overfishing definition based on sex ratio would assure that the long term ability of the stock to produce MSY would not be hindered" (page 4)

- Stock size should always remain at least part of the consideration of a crab stock's status relative to the risks of fishing (even if the hypothesized minimum sex ratio can be established).

"The word of the law (i.e., the MSA) and the intent is to manage fisheries to produce MSY" (page 5)

- Statement is absolutely and unambiguously false.
 - The "word of the law" (National Standard 1 of the MSA, Section 301) is: "Conservation and management measures **shall prevent overfishing** while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing Industry" (bold italics mine).
 - "optimum yield" is defined in the MSA **to be less than MSY** "The term 'optimum,' with respect to the yield from a fishery, means the amount of fish which... is prescribed as such on the basis of maximum sustainable yield from the fishery, **as reduced by any relevant economic, social, or ecological factors.**" (Section 104-297 28; bold italics mine)
- This misunderstanding carries into statements on page 2 (second paragraph) and page 3 (ast paragraph in sectiop headed "Analysis"), which erroneously assume that the goals of a harvest strategy under the MSA is to maximize yield.

Unsubstantiated statements:

"...fertilization has not been affected by directed fishing on males..(page 2)"

- This is a conjecture, based on no data, and is presented as fact.
 - Conjecture is hypothesized from misreading of sex-ratio information (above)

"...quite simply there is no impact from the fishery on the long term yield of opilio" (page 2; bold are Hilborn's).

- Statement is based upon nothing more than the above unsubstantiated statement.

"To maximize the biological yield from this stock, you would simply maximize the yield-per-recruit of males, which is done by the size limit combined with a 58% exploitation rate" (Page 2)

- Is this statement based on a review of the work and assumptions leading to the 58% exploitation rate and the 4-inch industry minimum size?

"Nothing in the current status of this fishery suggests that the fishery has affected the capacity of the fishery to produce MSY" (page 3).

- Statement is apparently based on no information other than the (earlier noted) misreading of a table in a stock status report. Dr. Hilborn has not demonstrated that he possesses the familiarity with this stock to justify making such a statement.

"The yield in this fishery is being driven by environmental factors affecting recruitment" (Page 3).

- Which factors and how?

"Clearly...the fishery has not jeopardized the capacity of a fishery to produce maximum sustainable yield on a continuing basis" (Page 4)

- If the data to back up this statement was available it should have been provided (and the arm-waving use of "clearly" would not be necessary here).