

**Observer Program Council motion**  
June 12, 2010

The Council directs staff to include new options (underlined below), address the SSC and Observer Advisory Committee recommendations to the extent practicable, and release the observer analysis (BSAI Am. 86/GOA Am. 76) for public review.

**Alternatives:**

Alternative 1. Status quo; continue the current service delivery model.

Alternative 2. GOA-based restructuring alternative. Restructure the program in the GOA, including shoreside processors; and include all halibut and <60' vessels participating in groundfish fisheries in the GOA and BSAI. Vessels in the restructured program would pay an ex-vessel value based fee. Retain current service delivery model for vessels  $\geq 60'$  and shoreside processors in the BSAI.

Alternative 3. Coverage-based restructuring alternative. Restructure the program for all fisheries and shoreside processors with coverage of less than 100 percent. Vessels in the restructured program would pay an ex-vessel value based fee. Leave vessels and processors with at least 100 percent coverage under the current service delivery model.

Alternative 4. Comprehensive restructuring alternative with hybrid fee system. Restructure program for all groundfish and halibut fisheries off Alaska. Vessels and shoreside processors with 100 percent or greater coverage would pay a daily observer fee; vessels and shoreside processors with less than 100 percent coverage would pay an ex-vessel value based fee.

Alternative 5. Comprehensive restructuring alternative that would assess the same ex-vessel value based fee on all vessels and shoreside processors in the groundfish and halibut fisheries in the GOA and BSAI.

Both options are applicable under Alternatives 2 – 5:

Option 1: For halibut fishery landings and landings by vessels less than [40', 50', or 60' LOA] participating in groundfish fisheries (fisheries and sectors not currently subject to the observer program), vessels and shoreside processors would pay one-half the ex-vessel value based fee established under the alternative.

Option 2: The agency shall release a draft observer program sampling design and deployment plan annually by September 1, available for review and comment by the Groundfish Plan Team at their September meeting. The SSC and Council shall review and approve the plan annually.

The Council motion also directed staff to revise the analysis and/or explore the following issues and provide further information in the analysis:

- Use nominal prices to determine the ex-vessel value based fee. Do not adjust nominal prices by the Producer Price Index.
- Use regional halibut and sablefish prices, as published by the NMFS RAM Division, when establishing standardized prices for halibut and sablefish.

The Council also approved a motion to task the Observer Advisory Committee, Council staff, and NMFS staff to develop electronic monitoring as an alternative tool for fulfilling observer coverage requirements with the intent that it be in place at the same time as the restructured observer program.

The Council also approved a motion to write a letter to NOAA HQ to request Federal funds for start-up funding to implement a restructured observer program in the North Pacific, as well as an annual appropriation of up to 50% of the cost of placing observers in any catch-share program fisheries.

## Executive Summary

This draft Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) examines the environmental and economic effects of BSAI Amendment 86 and GOA Amendment 76 to change the service delivery model for the North Pacific Groundfish Observer Program (Observer Program). The proposed action is intended to address a variety of longstanding issues associated with the existing system of observer procurement and deployment. The proposed action would replace the existing observer service delivery model, in which industry contracts directly with observer providers to meet observer coverage requirements in Federal regulations, with a new system (i.e., restructuring) in which NMFS contracts directly with observer providers and determines when and where observers are deployed. Vessels and processors under the restructured observer program would pay either a fee based on a percentage of ex-vessel revenue (not to exceed 2%), or a daily observer fee, to fund the program.

At its December 2008 meeting, the Council approved the following problem statement for restructuring the Observer Program:

### **BSAI Amendment 86/GOA Amendment 76 Problem Statement**

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

### **Proposed Alternatives**

The alternatives under consideration are described in this section. In addition to the no action alternative, four action alternatives to restructure the observer program are evaluated. The four restructuring alternatives are distinguished primarily by which fisheries or sectors would be included in the restructured program and the structure of the fee mechanism used. Two options are also proposed, which are applicable under any of the action alternatives.

One of the primary decision points under Alternatives 2 – 5 is the ex-vessel value fee percentage to be assessed, the maximum of which can be 2% under current law. Option 1 proposes to assess an ex-vessel value fee equal to half of that selected under the overall alternative, on halibut landings and groundfish landings from vessels either <40', <50', or <60' length overall. For example, if the ex-vessel value fee selected by the Council under a specified alternative was 2%, halibut landings and groundfish landings from small vessels would be assessed a 1% fee.

- Alternative 1. Status quo; continue the current service delivery model.
- Alternative 2. GOA-based restructuring alternative. Restructure the program in the GOA, including shoreside processors; and include all halibut and <60' vessels participating in groundfish fisheries in the GOA and BSAI. Vessels in the restructured program would pay an ex-vessel value based fee. Retain current service delivery model for vessels  $\geq$ 60' and shoreside processors in the BSAI.
- Alternative 3. Coverage-based restructuring alternative. Restructure the program for all fisheries and shoreside processors with coverage of less than 100 percent. Vessels in the restructured program would pay an ex-vessel value based fee. Leave vessels and processors with at least 100 percent coverage under the current service delivery model.
- Alternative 4. Comprehensive restructuring alternative with hybrid fee system. Restructure program for all groundfish and halibut fisheries off Alaska. Vessels and shoreside processors with 100 percent or greater coverage would pay a daily observer fee; vessels and shoreside processors with less than 100 percent coverage would pay an ex-vessel value based fee.
- Alternative 5. Comprehensive restructuring alternative that would assess the same ex-vessel value based fee on all vessels and shoreside processors in the groundfish and halibut fisheries in the GOA and BSAI.

The following options can be selected under Alternatives 2 – 5:

- Option 1: For halibut fishery landings and landings by vessels less than [40', 50', or 60' LOA] participating in groundfish fisheries (fisheries and sectors not currently subject to the observer program), vessels and shoreside processors would pay one-half the ex-vessel value based fee established under the alternative.
- Option 2: The agency shall release a draft observer program sampling design and deployment plan annually by September 1, available for review and comment by the Groundfish Plan Team at their September meeting. The SSC and Council shall review and approve the plan annually.

Table E-1 provides a summary of the vessels and processors included under each restructuring alternative.

**Table E-1 Vessels and processors included under Alternatives 2 – 5**

| <i>Area</i> | <i>Vessel/Processor class</i>                 | <i>Alt. 2<br/>(GOA-based)</i>   | <i>Alt.3<br/>(coverage-based)</i>                    | <i>Alt. 4<br/>(comprehensive<br/>with ex-vessel<br/>&amp; daily fees)</i> | <i>Alt. 5<br/>(comprehensive with<br/>ex-vessel fee)</i> |
|-------------|---|---------------------------------|--|---|--|
| GOA         | Halibut vessels                               | Ex-vessel fee                   | Ex-vessel fee for CVs; status quo system for CPs     | Ex-vessel fee for CVs; daily fee for CPs                                  | Ex-vessel fee  |
|             | Groundfish CVs (all gears and sizes classes)  | Ex-vessel fee                   | Ex-vessel fee  | Ex-vessel fee   | Ex-vessel fee  |
|             | Non-AFA inshore processors                    | Ex-vessel fee                   | Ex-vessel fee  | Ex-vessel fee   | Ex-vessel fee  |
|             | Pot CPs                                       | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Trawl CPs <125'                               | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Hook-and-line CPs <125'                       | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Trawl CPs ≥125'                               | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Hook-and-line CPs ≥125'                       | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Rockfish Program                              | Ex-vessel fee                   | Status quo   | Daily fee   | Ex-vessel fee  |
| BSAI        | Halibut vessels                               | Ex-vessel fee                   | Ex-vessel fee for CVs; status quo system for CPs     | Ex-vessel fee for CVs; daily fee for CPs                                  | Ex-vessel fee  |
|             | Groundfish vessels <60'                       | Ex-vessel fee                   | Ex-vessel fee  | Ex-vessel fee   | Ex-vessel fee  |
|             | Non-AFA CVs ≥60'                              | Status quo                      | Ex-vessel fee  | Ex-vessel fee   | Ex-vessel fee  |
|             | Pot CPs                                       | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | AFA CVs <125'                                 | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | non-AFA inshore processors                    | Status quo                      | Ex-vessel fee  | Ex-vessel fee   | Ex-vessel fee  |
|             | AFA CVs ≥125'                                 | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Non-AFA trawl & hook-and-line CPs 60' - <125' | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Non-AFA trawl & hook-and-line CPs ≥125'       | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | AFA & CDQ pollock inshore processors          | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | Motherships                                   | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
|             | AFA CPs                                       | Status quo                      | Status quo   | Daily fee   | Ex-vessel fee  |
| CDQ vessels | Ex-vessel value fee for halibut               | Ex-vessel value fee for halibut | Ex-vessel value fee for halibut; Daily fee for other | Ex-vessel fee   |  |

Note: Shaded cells represent inclusion in the restructured program. 'Status quo system' means the current system in which vessels and processors contract directly with observer providers to meet specified coverage requirements in Federal regulations.

**Coverage requirements and deployment of observers**

The issue of coverage levels arises with the implementation of a program that rescinds the current coverage levels based on vessel length and processing volume and replaces them with one in which NMFS has more flexibility to decide when and where to deploy observers. This is because some type of organizational structure is still necessary to categorize vessels and processors for the purpose of determining coverage levels. The establishment of coverage categories would also assist the Council in determining what levels of coverage are necessary when new management programs are proposed. As a

replacement for the existing vessel length-based categories, the following two tier system of coverage is proposed. Vessels and processors would either be in the category of <100% coverage or ≥100% coverage, based on their fishery and operating mode. The ≥100% (full coverage) category includes: (a) all CPs and motherships, and (b) CVs fishing within a management system that uses prohibited species caps in conjunction with catch share programs (Table E-2). All other sectors, including halibut and sablefish IFQ fisheries, would be in the <100% (partial coverage) category. The determination of which fishery sectors are placed into which category is a decision point at final action under any of the restructuring alternatives (Alternatives 2 – 5).

**Table E-2 Summary of vessels, shoreside plants, and management programs included in the ≥100% coverage stratum**

|   |
|---|
| <b>Stratum</b>  |
| <b>Full-coverage (≥100%)</b>  |
| All catcher processors and motherships <sup>1</sup>                               |
| All catcher vessels fishing cooperatives with transferable quotas. <sup>2,3</sup> |
| Shoreside processors taking deliveries of AFA and CDQ pollock                     |

<sup>1</sup>Includes FV Golden Fleece.

<sup>2</sup>Includes all pollock trips conducted by AFA eligible CVs in the Bering Sea and existing Central GOA Rockfish Program.

<sup>3</sup>An exception to this category is the halibut and sablefish IFQ fisheries, which would be in the <100% coverage stratum under the proposed action.

This analysis does not propose an annual mechanism through which a fishery would change from one category to another if it is determined that coverage levels need to be increased or decreased. Currently, all coverage levels are established in regulation and any changes to existing coverage requirements must be implemented through notice and comment rulemaking. This analysis assumes that formal rulemaking would also be necessary to change fisheries or sectors from one category to another (<100% versus ≥100%) under the new system. Agency flexibility would still be substantially increased through the proposed system, however, as the coverage levels for fisheries within the <100% (partial coverage) category could be shifted and modified on an inseason or annual basis.

The restructure of the observer program would require NMFS to efficiently allocate observer effort towards its multiple objectives within an established budget. The proposed action establishes the framework to work toward optimization of observer coverage to meet multiple objectives. The framework proposes a range of deployment allocations for the restructured observer program in the North Pacific. Under the proposed program, NMFS would expect to report regularly to the Council, with the goal of transparency with respect to the sample design and financial aspects of the program. NMFS and the Council would thus be able to track progress towards optimization. Details of program implementation, the sample design, and the proposed framework for deploying observers are provided in Chapter 3.

### **Funding mechanism**

All of the restructuring alternatives contained within this analysis could accommodate direct Federal funding if available. Federal funding may be necessary to get the program started, fund some direct coverage costs if industry fees are inadequate, and fund agency costs associated with implementing and maintaining the program. Therefore, any decisions related to the type of user fee would not preclude the possibility of obtaining Federal funding to cover observer deployment costs. There are several decisions related to the funding mechanism under each restructuring alternative. Section 2.9 of the analysis outlines the primary issues and concepts relevant to the funding mechanism.

Two primary types of observer fee programs are authorized under the MSA and proposed under the restructuring alternatives. Vessels and processors not included in the restructured program would remain in the existing regulated (pay-as-you-go) service delivery model and contract directly with observer providers to receive observer services (e.g., daily rate paid directly to observer providers).

**Ex-vessel value fee.** An ex-vessel value fee is proposed to fund coverage for many sectors under Alternatives 2 – 4, and for all sectors under Alternative 5. Fees based on the ex-vessel value of landed catch are the most common type of fee currently used in the North Pacific. The maximum ex-vessel value fee authorized under Section 313 of the MSA for observer coverage is 2%. Under the ex-vessel value fee program, the fee amount would be paid by both vessels and processors. Catcher processors that both harvest and process their catch would pay the entire fee percentage, and the intent is that catcher vessels delivering shoreside would split the fee 50:50 with the shoreside processor. This is the same approach taken under the original research plan in 1995. (Note that the 50:50 split between catcher vessels and processors would not be in regulation as it is not possible to enforce. Section 2.10.7 discusses who would likely bear the burden of the fee, regardless of intent.) There is also an option provided under each alternative to assess an ex-vessel value fee on halibut landings and groundfish landings from vessels either <40', <50', or <60' length overall that is equal to half of the fee assessed on all other sectors subject to the fee under the preferred alternative.

Advantages of an ex-vessel value fee include:

- *Equity.* An ex-vessel value fee is perhaps the most equitable method of funding observer coverage because it is based on the benefits received from the fishery.
- *Broad-based approach.* An ex-vessel value fee is the simplest to apply on a universal basis to all participants in the restructured observer program.
- *Predictability.* A fee that is withheld at the time of landing is likely easier for fishermen in terms of the ability to predict costs, and it would only require processors set aside sufficient funds to pay NMFS for coverage fees since harvesters pay at the time of landings.

Disadvantages of an ex-vessel value fee include:

- *Fee revenues not directly linked to coverage costs.* Because the fee revenues would not be directly related to observer coverage costs, it is highly likely that the program would experience revenue shortfalls or surpluses relative to the amount of observer coverage desired.
- *Data limitations.* Data that are currently available would require past years' ex-vessel prices to be applied to current year's catch. Using past prices would result in a different fee estimate than using actual revenue. Data limitations also preclude estimating seasonal standardized prices within a year. Depending on when a person harvests the fish, it could impact the difference between their actual ex-vessel revenue and the estimated revenue the fee was based upon.
- *Fee percentages could not be adjusted quickly.* The fees would be established in regulation, and could only be changed through regulatory amendment. Reductions in harvest/TAC or prices could result in lower revenue for observers than projected.

**Daily coverage fee.** A daily observer fee is proposed to fund coverage for those sectors in the  $\geq 100\%$  coverage category under Alternative 4. This approach would to some extent mirror the existing 'pay-as-you-go' program, except that vessel owners and shoreside plants would be billed by NMFS for their coverage instead of contracting directly with an observer provider. Such a fee could be designed to exactly match the direct costs of observer coverage, as is currently the case with the existing pay-as-you-

go program, or the fee could be set at a lower level than actual coverage costs if Federal funds become available to support the program.

#### Advantages of a daily observer fee based on coverage levels

- *Revenues could exactly match costs.* If the daily costs of observer coverage are known in advance (as they would be if NMFS entered into long-term contracts with observer providers) then a daily observer fee could be designed to exactly match the costs of coverage.
- *Fees more closely match monitoring requirements.* An ex-vessel value fee charges everyone based on their revenues without regard to differences in monitoring requirements in different fisheries. A fee based on coverage means that everyone pays for the coverage they receive.

#### Disadvantages of a daily observer fee based on coverage levels

- *Does not address disproportionate cost issues.*

#### **Setting the fee level**

If a restructuring alternative (Alternatives 2 – 5) is selected, one of the most important decision points for the Council is setting an initial fee percentage for those sectors that will operate under an ex-vessel value based fee, and establishing the daily fee for sectors that will operate under a daily fee. The fee percentage (and the level of Federal funding, if available) would determine the program's budget and would directly affect coverage levels in the fisheries covered by the program and costs paid by industry. Some of the major assumptions and decision points associated with the ex-vessel fee are:

1. Ex-vessel fees would be based on standardized ex-vessel prices calculated using data derived from COAR using the methodology developed by the CFEC for their gross earnings estimates.
2. For the groundfish fishery, the time required to collect, analyze, and apply price data to the eLandings system would result in 2-year old prices being applied to the harvest data.
3. It is anticipated that when an ex-vessel fee is assessed that the harvester would pay half of the fee and the processor would pay the other half. The processor would collect the harvester's portion of the fee at the time of landing. Under Alternatives 3 and 4, catcher vessels that deliver unsorted cod ends would not be subject to an ex-vessel fee and would not be subject to the daily fee. Catcher vessels that deliver sorted catch to a catcher processor or mothership would be subject to paying their half of the ex-vessel fee and it would be collected by the processor at the time of the landing.
4. Standardized ex-vessel prices would be set for species, port of landing, and gear. Because of data confidentiality issues, data must be aggregated if there are fewer than 3 entities in a price category. It is proposed that the prices would be set for fixed gear, pelagic trawl gear, and non-pelagic trawl gear. Ports and species would be aggregated as needed to preserve confidentiality.
5. Using a rolling average price instead of an annual price could serve to stabilize fee revenues. The Council could choose to use this approach.

#### **Contracting process**

Under all of the alternatives under consideration, private observer companies would continue to be the source of observers deployed under the restructured program. The main difference under the restructuring Alternatives 2 – 5 is that NMFS would be the entity responsible for contracting for observer



coverage rather than the vessel owner. Complex regulations and procedures already govern the Federal contracting process. Therefore, this analysis does not examine alternatives to the process that would govern direct Federal contracting for observer services. The existing Federal contracting process is described in Section 3.1, to provide the Council and the public with an understanding of how the program would operate, should one of the restructuring alternatives be adopted. This section also explores the role of contractors under a new program, and whether single or multiple contracts, and single or multiple contractors, are preferable.

Several different contract modules are possible but are difficult to develop until the scope of work is defined. In essence, there are several ways to accomplish any task and distribute work. Contracting is flexible and will accommodate various desired scenarios. For example, the work can be broken into components regionally (BSAI or GOA), by gear type, or by vessel size class. Various combinations are possible. It is also possible to develop different types of work modules. One module could be for overall coverage planning and another for the provision of observers to obtain that coverage. Once the scope of work and funding are identified, NMFS can further develop alternative contract modules for consideration.

Because Federal contracting must follow well-established procurement processes, there are no Council decisions related to the contracting process in this amendment. Rather, NMFS would keep the public and the Council informed of the process as the scope of work becomes better defined.

### **Summary of economic effects**

This amendment considers the status quo management (no action) as well as four action alternatives to restructure the observer program for the halibut IFQ fishery and all or parts of the BSAI and GOA groundfish fisheries. Option 1 applied to Alternatives 2 through 5 would reduce the ex-vessel portion of the observer fee by half, for halibut landings and for groundfish landings by vessels less than 60' LOA, 50' LOA, or 40' LOA. Vessels that are assigned a Federal Fisheries Permit (FFP) and fish in a Federal or parallel fishery (both State and Federal oversight) would be covered under this amendment. Vessels that are not assigned an FFP and fish in parallel fisheries and vessels that only fish in State managed fisheries are not included in this amendment. The ex-vessel observer fee would only apply to vessels and processors that are in the less than 100% coverage category in Alternatives 3 and 4. Catcher processors are in the 100% coverage category so they would be required to continue the pay-as-you-go observer payments under Alternative 3 or pay a daily fee under Alternative 4. Vessels would be classified as a catcher processor or catcher vessel based on the Federal Fisheries Permit designation. The ex-vessel observer fee would apply to all vessels and processors under Alternative 5.

**Alternative 1** would maintain the status quo. Based on 2008 fishery data, a total of 464 observers worked 39,344 days on 296 vessels and in 21 plants. Each observer day was estimated to cost \$366,<sup>1</sup> for a total observer cost of \$14.4 million to the harvesters and processors in the North Pacific. Halibut vessels and registered buyers, as well as vessels <60' LOA, are not required to carry observers under the status quo and currently do not have observer expenses related to this program.

**Alternative 2** would restructure the observer program for all halibut IFQ holders, GOA harvesters and processors, and catcher vessels <60' LOA when harvesting BSAI groundfish. BSAI CVs that are ≥60' LOA would remain under the status quo observer requirements. Vessels and processors subject to the restructured observer program would pay an ex-vessel value based fee that must not exceed 2% of their ex-vessel revenue. The revenue estimates for each action alternative in the RIR are based on the maximum ex-vessel value fee of 2%, as this analysis proposes that the first year(s) of the program would

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<sup>1</sup>Refer to Appendix 6 for the calculations used to estimate the cost of an observer day (\$366/day) under the status quo program in which industry contracts directly with observer providers.

require a 2% fee until sufficient startup funding is generated to contract with observer providers for the restructured sectors.

Section 2.10 provides a detailed description of the costs to industry. Under Alternative 2, the ex-vessel fee is projected to cost industry about \$6.7 million per year. Halibut and sablefish IFQ account for about 76% of the ex-vessel fee revenue (\$3.8 million), but only about 27% of the total observer costs. Shoreside groundfish deliveries account for most of the remaining ex-vessel revenue (\$1.4 million). The \$6.7 million would fund about 14,000 observer days, based on an observer cost of \$467/day.<sup>2</sup> Industry members that remain under the status quo were estimated to use 34,234 observer days at a cost of \$12.5 million. The total estimated annual (mean) observer cost under Alternative 2 is \$19.2 million. That represents an increased cost to the fleet and processors of about \$4.8 million per year relative to the status quo. The increased costs would provide increased pay and benefits, on average, for observers in the restructured program. Restructuring the GOA fishery is expected to reduce sampling bias and expand coverage to improve data collected.

If Option 1 were implemented under Alternative 2, the ex-vessel fee paid by the sectors it affects would be reduced to half the estimated amount. Option 1, <60' would reduce the amount halibut catcher vessels pay by about \$1.9 million annually and the total amount all sectors pay by \$2.6 million (using 2005 - 2008 ex-vessel revenue estimates). Observer days funded would be reduced from 48,619 to 42,983. The lower estimate still exceeds the 39,344 days used in 2008. Option 1, <50' would reduce the observer fee percentage for halibut landings and groundfish catcher vessels <50' LOA. Because the 50' - 59.9' groundfish catcher vessels do not qualify for the reduced ex-vessel fee percentage, the revenue generated is reduced annually by \$2.0 million instead of \$2.6 million. The \$2.0 million reduction in revenue equates to about 4,303 fewer observer days than under Alternative 2 alone. Finally, Option 1, <40' would reduce observer revenue annually by \$1.9 million and purchase 4,096 fewer observer days.

**Alternative 3** would restructure the observer program for vessels in the less than 100% coverage category (see Section 2.10.3). These are catcher vessels and shoreside processors that are not participating in the Bering Sea pollock fishery or the GOA Rockfish Program. All catcher processors and motherships would remain in the status quo pay-as-you-go fishery under Alternative 3. The costs to the halibut fleet would differ only slightly under Alternative 3 compared to Alternative 2. Catcher vessel costs and coverage would remain the same, but halibut catcher processors, like groundfish catcher processors, would be subject to 100% coverage and be required to contract directly with an observer provider to obtain their required coverage. Including catcher processors in the ≥100% coverage class is expected to decrease halibut ex-vessel fee revenue by \$0.3 million; the vessels that would be exempt from the ex-vessel fee would be required to pay the pay-as-you-go coverage fee.

The total ex-vessel fee revenue under Alternative 3 is projected at about \$6.7 million annually. That fee is paid exclusively by catcher vessels and shoreside processors. Catcher processors and motherships are projected to use 34,477 observer days (based on 2008) at a cost of \$12.6 million (\$366/day).<sup>3</sup> The total annual mean observer cost under Alternative 3 is about \$19.4 million or a \$5.0 million per year increase over status quo (2008). The increased observer cost is projected to fund an additional 9,576 observer days. If the Council were to select Option 1, <60' LOA, in conjunction with Alternative 3, the revenue available for observers is projected to decline annually by \$2.4 million and purchase 5,222 fewer days. Option 1, <50' LOA would require vessels in the 50' - 59.9' class to pay the full ex-vessel fee. Therefore, the reduction in annual observer revenue is only about \$1.9 million (3,953 days). Option 1,

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<sup>2</sup>Refer to Appendix 6 for the calculations used to estimate the cost of an observer day (\$467/day) under a restructured program in which NMFS contracts directly with observer providers.

<sup>3</sup>Note that the costs to sectors that remain under status quo may be underestimated if the cost of an observer day increases to approach those in the restructured fleets (\$467/day). As the costs for the status quo sectors approach \$467/day, the cost estimates would approach those presented under Alternative 4.

<40' LOA yields results that are similar to Option 1 <50' LOA. Those two options only differ by about \$100,000 (200 days). Based on projected revenue from the 2005 - 2008 fishing years, all the options under Alternative 3 are projected to fund more days than were used during 2008. However, if Option 1 <60' LOA were selected, it would not leave much reserve funding if a lower revenue year than the average were to occur.

It is expected that restructuring the program for vessels and processors in the <100% coverage category would improve observer collected information, similar to the benefits predicted for the GOA under Alternative 2. Observer program staff would have the flexibility to deploy observers when and where they could generate the greatest benefit. It is also projected that additional days of observer coverage would be available to distribute to the areas of greatest need.

**Alternative 4** is structured the same as Alternative 3 in terms of which sectors pay the ex-vessel fee (Section 2.10.4). Therefore, the ex-vessel fee projections are the same under both alternatives. Because Option 1 is based on the ex-vessel fee, the change in observer days and costs would also be the same for those sectors under both alternatives. The difference between Alternative 3 and 4 is that catcher processors, motherships, and 100% covered shoreside processors are also restructured under Alternative 4. They are required to pay a daily observer fee to NMFS for each day of coverage. An observer coverage day under the restructured program is estimated to cost \$467. Because the daily observer coverage rate is higher under Alternative 4 than the status quo daily coverage rate, the total estimated cost of the program is also higher (see Appendix 6). In total, Alternative 4 is projected to cost industry \$22.8 million annually, which represents an increase of about \$8.4 million per year over the status quo. Data improvements would be similar to those projected under Alternative 3.

**Alternative 5** would include all industry sectors under the restructured program, and they would pay a fee based on a percentage of ex-vessel revenue. Section 2.10.5 of this analysis provides a detailed discussion of Alternative 5. The analysis of Alternative 5 projects that the annual mean cost of observer coverage would be about \$18.6 million (ex-vessel fee revenue), or an increase of \$4.2 million per year over the status quo. That revenue would fund 39,926 observer days. If the revenue estimate of minus one standard deviation from the mean is realized, the number of days funded would decrease to 34,284. This estimate is a reduction of about 5,000 days compared to status quo (2008). Selecting any of the Option 1 suboptions would reduce the number of observer days that could be funded below 2008 levels, using the mean ex-vessel fee estimate. At the mean ex-vessel revenue, estimates of the number of days would be 3,500 to 5,000 below status quo.

The restructured observer program under Alternative 5 would provide NMFS with greater flexibility regarding the deployment of observers, and reduce the bias associated with the current program. However, it is possible that the number of days that would be funded would be below status quo (2008 levels) in some years. Reducing the number of days below status quo negatively impacts the effectiveness of this alternative.

#### Economic impacts on harvesters, processors, crew, and communities

The proposed observer fee is an access fee that industry would be required to pay to utilize the public fishery resource. Council intent is that the ex-vessel fee be paid equally by the harvester and processor. However, the Council realized that its desired split of the fee cannot be enforced, and thus would not be established in Federal regulations. As a result, it is anticipated that harvesters would pay the majority of the fee through reductions in the ex-vessel value of fish landed (see Section 2.10.7). The decreased cost could also impact crew through consolidation of the fleet (fewer jobs available) or reductions in crew payments. Fleet consolidation could also impact delivery patterns in communities. These impacts are

primarily distributional, as the fish would be expected to be harvested by other vessels and delivered to the same or a different community.

### **Net benefits to the Nation**

Alternative 1 would have no effect on net benefits to the Nation. The status quo observer program would continue for the >60' groundfish fleet without modification by this amendment, and halibut and <60' groundfish vessels would remain exempt from observer coverage requirements. Alternatives 2 through 5 would slightly increase net benefits to the Nation for the portion of the fleet that is restructured. The restructured program is expected to increase accuracy and reduce bias in the catch and bycatch data by placing observers in fisheries that would provide the greatest benefit. It would also facilitate observers being placed on vessels that have low profit margins without substantially increasing their costs. Reducing the bias in the catch data is expected to improve NMFS inseason management, stock assessments, and policy decisions for groundfish and halibut in the North Pacific.

### **Environmental assessment**

An environmental assessment (EA) is intended, in a concise manner, to provide sufficient evidence of whether or not the environmental impacts of the action is significant (40 CFR 1508.9). Three of the four required components of an environmental assessment are included in Section 4. These include brief discussions of: the purpose and need for the proposal, the alternatives under consideration, and the environmental impacts of the proposed action and alternatives. The fourth requirement, a list of agencies and persons consulted, is provided in Section 8.

The net effect of Alternatives 2 – 5 is to change the system under which observers are deployed on vessels and processors, the determination of coverage on vessels and processors, and the way vessels and processors pay for observer coverage. Effects on target species should not be significant under Alternatives 2 – 5. The TACs are determined annually based on the biomass of the fish species, and effective monitoring and enforcement would continue to ensure that the overall TACs are not exceeded. Therefore, regardless of the observer deployment system in place, the total allowable catch of the target species would not increase under the proposed action. To the extent that the proposed changes to the observer program would provide managers with better estimates of target and incidental harvest and bycatch, increase flexibility in deploying observers, and ensure harvest rates remain within TAC levels, impacts to the target species or species groups are predicted not to be significant for target fish stocks. Consequently, no adverse impact to target or incidental catch species is anticipated from the alternatives, compared to the status quo.

Changes in interactions with other fish species, including prohibited species, are tied to changes in target fishery effort. To the extent that overall fishing effort in the groundfish and halibut fisheries is not expected to change due to the proposed action, effects on mortality levels of prohibited species are not expected to be significant. Changes to the deployment of observers will likely provide managers with better estimates of incidental and directed take of prohibited species and serve to ensure harvest rates will remain below PSC limits, thus ensuring that the groundfish fisheries would not reasonably be expected to cause a conservation concern for PSC species.

Given that an overall increase in fishing activity is not expected under Alternatives 2 - 5, and there are measures currently in place to protect the physical and biological environment, the potential effect of the action on an ecosystem scale is very limited. As a result, no significant adverse impacts to marine mammals, seabirds, habitat, or ecosystem relations are anticipated.

## Initial Regulatory Flexibility Analysis

The IRFA is provided in Section 5. The IRFA addresses the statutory requirements of the Regulatory Flexibility Act (RFA), and evaluates the potential adverse economic impacts on small entities directly regulated by the proposed action. Under the alternatives with the largest scope (Alternatives 4 and 5), there are 1,886 entities estimated to be directly regulated by the proposed action, based on 2008 data. Large entities are categorized as such for the purpose of the RFA due to the principles of affiliation, as part of harvesting and processing cooperatives, or because they meet the \$4.0 million threshold.<sup>4</sup> The only entities considered large in this analysis are AFA vessels, BSAI Amendment 80 catcher processors,<sup>5</sup> AFA shoreside processors (and additional processors owned by the same companies), and individual vessels that had more than \$4 million in ex-vessel revenues in 2008. In sum, there are an estimated 155 large entities and 1,731 small entities, as defined under the RFA, directly regulated by the proposed action under the alternatives with the largest scope.

An IRFA also requires a description of any significant alternatives to the proposed action(s) that accomplish the stated objectives, are consistent with applicable statutes, and that would minimize any significant economic impact of the proposed rule on small entities. While significant alternatives to the proposed action have not been identified, there are several provisions included in the proposed action that may reduce economic impacts on small entities. Option 1 would establish an ex-vessel value fee equal to *half* of that selected under the preferred alternative to be assessed on all halibut IFQ landings and on groundfish landings from vessels either <40', <50', or <60' length overall. If Option 1 is selected, the maximum fee that could be assessed on this subset of the fishing fleet is 1%, as the maximum ex-vessel value fee that could be selected under each alternative is 2% under the MSA.

In addition, the proposed observer deployment on vessels in the partial coverage stratum differs for the smallest vessels (Section 3.2.7). In the initial year(s) of the program, NMFS has proposed that catcher vessels using jig gear and catcher vessels  $\leq 40'$  LOA using pot and/or hook-and-line gear would not be selected to carry an observer. Catcher vessels using pot and/or hook-and-line gear  $>40'$  -  $<57.5'$  LOA would be subject to a vessel selection system, in which they could be randomly selected to carry an observer at the beginning of the year, for a specified period of time. In addition, there are potential alternatives to carrying an observer proposed for the class of vessels in the vessel selection list. While the vessels in the 'no selection' category and the vessel selection system would be required to pay the ex-vessel value fee for the landings subject to the new program, those with no or low selection probability would not incur the other direct or indirect costs of carrying an observer. The IRFA will be finalized upon selection of a preferred alternative.

### Primary decision points for Council consideration

The primary decision point for the Council in this amendment is to select a preferred alternative. Four alternatives (Alternatives 2 – 5) for restructuring the observer program are analyzed in addition to the no action alternative (Alternative 1). The primary difference between the action alternatives is the scope of the restructured program (which vessels and processors are included) and the fee mechanism employed (ex-vessel value fee or daily fee). Should the Council choose one of the restructuring alternatives as its preferred alternative, a second decision point is whether to select Option 1 and/or Option 2 in conjunction with that alternative. In addition, each action alternative has associated decision points, which include:

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<sup>4</sup>A business involved in both the harvesting and processing of seafood products is a small business if it is independently owned and operated, not dominant in its field of operation (including its affiliates), and if it has combined annual gross receipts not in excess of \$4.0 million for all its affiliated operations worldwide.

<sup>5</sup>Note that three of the catcher processors that qualified under Amendment 80 have subsequently sunk, and one was sold to Russia and cannot re-enter U.S. fisheries. However, a recent court decision (*Arctic Sole Seafoods v. Gutierrez*, May 19, 2008) ruled that a qualified owner of an Am. 80 vessel may replace a 'lost' vessel with a single substitute vessel. thus, there is the potential for 28 vessels to apply for Am. 80 quota in any given year.

1. **Ex-vessel value fee percentage.** If an action alternative (Alternatives 2 – 5) is selected as the preferred alternative, one of the fundamental decision points is to select the ex-vessel value fee percentage to be assessed, the maximum of which can be 2% under current law. If Option 1 is selected under Alternatives 2 – 5, it would assess an ex-vessel value fee equal to half of that selected under the overall alternative, on halibut landings and groundfish landings from vessels either <40', <50', or <60' length overall.
2. **Two tier system for general coverage categories.** Vessels and processors are proposed to be in the category of <100% coverage or  $\geq$ 100% coverage, based on their fishery and operating mode. These two coverage categories would be established in regulation, but the deployment strategy and allocation of observer days within the <100% coverage category would not be in regulation, and would instead be determined on an annual basis by NMFS. The  $\geq$ 100% (full coverage) category is proposed to include: (a) all CPs, motherships and shoreside processors taking deliveries from the directed pollock fishery in the Bering Sea, and (b) CVs fishing within a management system that uses prohibited species caps in conjunction with catch share programs (Table E-2). All other sectors, including the halibut and sablefish IFQ fisheries, would be in the <100% coverage category. The determination of which sectors are placed into which category is a decision point at final action under any of the restructuring alternatives (Alternatives 2 – 5).
3. **Use of a rolling average ex-vessel price versus an annual price, to calculate the annual ex-vessel fee.** The percentage ex-vessel value fee would be fixed in regulation (e.g., 2%), which would require subsequent Council action and a regulatory amendment to adjust. However, because harvest levels, prices, and coverage costs vary annually, the Council may wish to consider using a rolling average price to reduce the annual variation in prices, and thus, revenues. The longer the period of time used to create the rolling average price, the less effect a price that is substantially different from other years has on the average price. Using fewer years for the rolling average allows the price to respond more quickly to increases or decreases in ex-vessel price (which may or may not be linked to changes in the TAC). A 3-year, 5-year, and 7-year running average are considered in Section 2.9.2.2.4.
4. **Exclusion of State water GHL fisheries.** As stated above, the proposed program excludes vessels fishing in the State managed GHL groundfish fisheries in State waters from observer coverage requirements and associated fees under the restructured program, even if they have a Federal Fisheries Permit (FFP). This represents a policy decision, as NMFS may have the legal authority to collect an observer fee from FFP vessels participating in the State-managed GHL fisheries; however NMFS' policy recommendation is not to exercise this authority. Section 2.5 addresses this issue and shows the number of vessels that participate in these fisheries, as well as the level of harvest that would potentially be excluded from the program.
5. **Whether catcher vessels that deliver unsorted cod ends to a mothership are subject to the ex-vessel fee under the alternatives is a policy decision.** Catcher processor and mothership vessels are included in the Alternative 3 and Alternative 4 ex-vessel value fee tables because of their mothership activity when catch delivered to them was made by a catcher vessel that is not included in the  $\geq$ 100% coverage category. In those cases, a 1% ex-vessel fee was charged for only the catcher vessel portion of the fee, since the mothership falls under the  $\geq$ 100% coverage category and would be subject to the daily fee. The Council should determine whether the catcher vessels that deliver *unsorted cod ends* to a mothership are subject to the ex-vessel fee under these alternatives. For the purposes of the analysis, staff assumed that they would be exempt from fees because they are (both currently and under the proposed action) exempt from observer coverage. Fixed gear catcher vessels (pot and longline) that deliver sorted catch to a mothership would be subject to observer coverage and required to pay the ex-vessel fee for their deliveries.

6. **How to define a catcher processor.** Should catcher processors be defined for the  $\geq 100\%$  coverage stratum based on their Federal Fisheries Permit designation, license operation designation (CP vs CV), or actual historic activity for a designated time period? Based on direction from the Council in June 2010, the analysis uses historic activity to determine how to treat the vessel (CP vs CV) for analytical purposes. *Upon implementation of the proposed action, analysts recommend using the Federal Fisheries Permit designation.* That method would allow the permit applicant to choose their designation for future fishing years (the 3 year permit period). This issue is discussed in Section 2.10.3. If historic activity is selected as the basis for the basis of the CP designation, NMFS would need to review how the vessel operated for some period of time to determine the designation. Both the length of time considered to make the determination, and whether the designation would be in perpetuity, would need to be determined.
7. **Development of standardized ex-vessel prices to apply to (non-IFQ) groundfish landings to determine the ex-vessel value based fee liability.** The Council could confirm or modify the proposed approach in its final motion. The proposed approach includes the use of COAR pricing data, and a method of determining prices by: individual species (as opposed to species complex); fixed, pelagic trawl, and non-pelagic trawl gear types; individual ports if possible and then by aggregating surrounding ports if necessary for confidentiality; and the weighted average of all delivery and disposition codes. Refer to Section 2.9.2.2.1. (The Council also requested that statewide average prices developed by the State of Alaska to collect the State Fishery Resource Landing Tax. If the statewide average prices are selected, the Council may wish to consider whether the ex-vessel observer fee should only be applied to retained catch that is sold, since that is how that State tax is calculated.)
8. **Apply the annual IFQ price, developed for the costs recovery program, by port or port group from the previous year to determine IFQ ex-vessel observer fees.** This is the approach proposed in the analysis; the Council should confirm or modify this approach.
9. **Start-up funding.** Absent Federal funding, the approach to collecting start-up funds is the same as was proposed in 1995 under the Research Plan. Fees would be collected from industry in the year(s) prior to the implementation of a restructured program in order to fund year-1. Under a proposed 2% fee, in year-0, a vessel or processor would pay the difference between the 2% fee assessment and their actual year-0 observer costs under the status quo. Alternatively, the Council could recommend deferring implementation of the program until Federal start-up funds are available. The estimates of start-up funding required, and the amount of time it would take to generate sufficient start-up funds to implement the program, are discussed in Section 3.3.

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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June 30, 2010

Eric Schwab, Assistant Administrator for Fisheries  
NOAA  
1315 East-West Hwy  
SSMC3, Rm 14636  
Silver Spring, MD 20910

Dear Mr. Schwab:

We are writing to request the agency's help in order for the North Pacific Fishery Management Council (Council) and the NMFS Alaska Region to successfully restructure the North Pacific Groundfish Observer Program. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) has mandated management actions to minimize bycatch and waste, place limits on allowable annual catch, and has provided requirements associated with establishing limited access privilege programs (i.e., catch share programs) to limit fishing effort or access to fisheries. The implementation of these management objectives and others require timely, reliable, and scientifically valid information, as well as effective fisheries monitoring. The primary mechanism for collecting these data and monitoring our fisheries is through the deployment of trained fisheries observers. In the North Pacific, observers provide catch and bycatch information for quota monitoring and management of groundfish and prohibited species, biological data and samples for use in stock assessment analyses, information to document and reduce fishery interactions with protected marine resources, and information and samples used in marine ecosystem research.

The Federal groundfish observer program in Alaska is the oldest and largest observer program in the Nation and the only one whose direct costs of deploying observers are entirely funded by industry.<sup>1</sup> NMFS began placing observers on foreign fishing vessels operating off the northwest and Alaskan coasts in 1973, creating the North Pacific Foreign Fisheries Observer Program. The program greatly expanded in 1976 with the passage of the MSA, which mandated observer coverage on foreign-flagged vessels and processors operating in the U.S. By the late 1970s, American fishermen began entering the North Pacific groundfish fisheries that were previously pursued by foreign vessels, first as joint-ventures with foreign processing ships and later through the development of a domestic processing industry. By 1991, all foreign operations and joint-venture processing operations off Alaska were ended.

The North Pacific Fishery Management Council recognized the continued need for observers in the North Pacific groundfish fisheries to monitor catch and bycatch as the industry shifted from foreign to domestic vessels. In 1989, the Council developed the current domestic observer program and established observer coverage requirements for vessels and processors, which largely remain in place today. With the exception of vessels <60' length overall, all Federal commercial groundfish fisheries off Alaska are subject to observer coverage requirements and pay observer companies directly for observers to meet

<sup>1</sup>The only other fisheries with industry funding of observers are the offshore component of the West Coast Pacific hake fishery and the Atlantic scallop fishery. However, over 90 percent of the industry funding for observer programs is attributed to the North Pacific groundfish fisheries (Source: NMFS, 2009. National Observer Program Annual Report 2008. U.S. Department of Commerce, NOAA, NMFS, Silver Spring, MD.)



regulated levels of coverage. These regulations generally establish observer coverage levels for vessels based on vessel length, and for processors based on monthly processing volume. Specific, higher coverage requirements have been adopted for vessels and processors operating in catch share programs such as the American Fisheries Act (AFA) Bering Sea pollock fishery, the Community Development Quota (CDQ) Program in the Bering Sea and Aleutian Islands (BSAI), the BSAI Amendment 80 flatfish and Pacific cod fisheries, and the Rockfish Pilot Program in the Gulf of Alaska. The vessels and processors participating in these programs must carry either one or two observers at all times, depending upon the vessel and the program. The vast majority of observer deployment days in the North Pacific are on vessels and in processors operating under catch share programs in the BSAI.

Under the current program, NMFS provides operational oversight, certification training, definition of observer sampling duties and methods, debriefing of observers, and management of the data. While the costs associated with managing the program are paid for by the Federal government, the vessel and plant owners pay for the entire cost of observers (on a daily basis) through contracts with private observer companies. In 2008, NMFS paid approximately \$5.4 million toward the costs of operating the North Pacific Groundfish Observer Program.<sup>2</sup> Industry paid approximately \$14.4 million, or 73 percent of the total cost.<sup>3</sup> This funded more than 39,000 observer days in 2008, more than half the observer days across the U.S.

This approach has provided the Council and NMFS with the tools to successfully manage the Nation's largest groundfish fisheries for more than 20 years. However, despite what is considered a very successful record of management in the North Pacific due in part to data gathered by observers, NMFS and the Council are currently working toward restructuring the Observer Program such that NMFS would contract directly with observer companies and deploy observers according to a scientifically valid sample design. The design of the new program would serve to reduce sources of bias that jeopardize the statistical reliability of catch and bycatch data, which can occur under a program in which NMFS does not control when and where observers are deployed in fisheries that are not required to carry an observer 100 percent of their fishing days. In addition, the new program would include the commercial halibut sector and the <60' groundfish sector, neither of which are subject to observer requirements under the existing program. The new program is proposed to be supported by an industry fee based on the ex-vessel value of the landings, and/or a daily fee based on actual observer costs, as authorized under Section 313 of the MSA. This action is important to improve the North Pacific observer data for NOAA and the Council, and it would address a longstanding recommendation of the Department of Commerce Inspector General. The Council needs NOAA's help in moving this action forward.

**The Council reviewed an initial review draft analysis of the proposed action at its June 2010 meeting, and upon review, approved a motion to request Federal funds from NOAA for start-up funding to implement a restructured observer program in the North Pacific, as well as an annual appropriation of up to 50 percent of the cost of placing observers in any catch share program fisheries. The Council's June 2010 motion in entirety is included as Attachment 1.**

The Council is aware that the majority of other regional observer programs are funded through appropriations from Congress, and that more than \$33 million in Federal funding was provided across all regions in 2008. As stated previously, the North Pacific groundfish observer program typically receives just over \$5 million in Federal funds to cover agency expenses associated with training, debriefing, and supporting observers in the field, as well as costs associated with data quality control, management, and

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<sup>2</sup> NMFS, 2009. National Observer Program Annual Report 2008, U.S. Department of Commerce, NOAA, NMFS, Silver Spring, MD. 32 pp.

<sup>3</sup> Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Proposed Amendment 86 to the BSAI FMP and Amendment 76 to the GOA FMP: Restructuring the program for observer procurement and deployment in the North Pacific, June 2010. NPFMC. NMFS. p. 77.

analysis. The North Pacific groundfish industry pays the remaining \$13 million to \$15 million to cover the actual costs of deploying observers, including travel, accommodations, and insurance. In total, Federal funds typically represent about 25% - 30% of the total program costs.

For comparison purposes, the North Pacific costs can be compared to the costs of other observer programs in the U.S. that are Federally funded. For example, the Northwest Region observer program that monitors groundfish vessels fishing off the coast of Washington, Oregon, and California received about \$5.2 million in funding in 2008, with an additional \$390k in industry funding (i.e., 93% Federally funded). A total of 4,596 sea days was observed.<sup>4</sup> The Northeast Observer Program received a total of approximately \$11.8 million in program funding in 2008, with an additional \$2.3 million paid by the fishing industry to observe the Atlantic sea scallop fishery (i.e., 84% Federally funded). Over 13,000 sea days were observed in total.<sup>5</sup> The remaining regional observer programs are 100% Federally funded.

The Council is aware that NOAA is proposing \$54 million in catch share funding for FY 2011, a significant portion of which will fund observer programs in fisheries managed under catch share programs other than the North Pacific. As the majority of our fisheries are managed under catch share programs, the examples highlight a disparity in Federal funding to the various regions of NMFS in support of Observer Programs in general, and catch share programs specifically. It is unclear why the North Pacific industry bears the burden of paying for observer coverage, while other NMFS regions are heavily, and in some cases completely, subsidized by the Federal government.

Upon review of the proposed action to restructure the existing North Pacific observer program for the groundfish and halibut fisheries, the Council was provided with the associated start-up costs and annual costs estimated for the alternatives under consideration. The total annual cost of a restructured observer program, which includes both the groundfish and halibut fisheries, is estimated to range from \$19.4 million - \$22.7 million, depending upon the alternative. In addition to the catch share programs currently subject to observer requirements outlined previously, vessels and processors participating in the halibut and sablefish catch share program would also be part of the new program.

**Estimated costs of a restructured observer program in the North Pacific**

| Summary of costs   | Alternative 1 (status quo) | Alternative 2 | Alternative 3 | Alternative 4 | Alternative 5 |
|--|----------------------------|---------------|---------------|---------------|---------------|
| Start-up costs generated through industry fees   | n/a                        | \$2.3         | \$2.2         | \$17.7        | \$17.7        |
| # of years to generate start-up funding through industry fees                              | n/a                        | 0.3           | 0.5           | 3.6           | 9.9           |
| Total annual estimated cost in millions <sup>1</sup> (based on # of observer days in 2008) | \$14.4 m                   | \$19.4        | \$19.8        | \$22.7        | \$19.5        |
| # of annual observer days funded   | 39,300                     | 50,600        | 50,400        | 50,400        | 43,300        |

Source: Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Proposed Amendment 86 to the BSAI FMP and Amendment 76 to the GOA FMP, June 2010. NPFMC, NMFS.

<sup>1</sup>These estimates are based on the cost of the direct deployment of an observer, including travel, accommodations, and insurance, which is the portion of the cost incurred by industry in the North Pacific. They do not include the expenses typically incurred by NMFS to provide operational oversight, observer training, definition of observer sampling duties and methods, debriefing of observers, and management of the data.

Note: The estimates under Alternatives 2- 5 are based on the estimated average daily observer deployment cost of \$450/day for those sectors included under a contracted model, in which NMFS contracts directly with observer companies, and \$366/day for those sectors that remain under the regulated model, in which industry contracts directly with observer companies

<sup>4</sup>NMFS, 2009. National Observer Program Annual Report 2008. U.S. Department of Commerce. NOAA, NMFS. Silver Spring, MD, p. 12.

<sup>5</sup>NMFS, 2009. National Observer Program Annual Report 2008, U.S. Department of Commerce. NOAA, NMFS. Silver Spring, MD, p. 16.

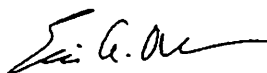
Under all of the alternatives, NMFS would enter into direct contracts with observer companies to varying extents. Thus, start-up funds would need to be available to NMFS to move from the existing program structure to the new, contracted model, as NMFS cannot assign contractual task orders without having funds available. The table above indicates that start-up costs range from \$2.2 million to \$17.7 million, depending upon the alternative selected. Lacking Federal start-up funds, NMFS would need to collect sufficient fees from industry in addition to existing observer expenses in a given year or years, in order to build up the funds necessary to issue task orders in the first year of a new program. The table provides an example of start-up and annual costs, the number of years it would take to generate sufficient start-up funds, and the number of observer days that could be funded under the construct of the alternatives.

Given that the management of the nation's fisheries is substantially dependent upon the deployment of at-sea observers to collect reliable information about catch and bycatch, and that movement toward a new observer program in the North Pacific would require funding beyond existing observer expenses prior to implementation, the Council strongly encourages NOAA to provide start-up funding to ensure a rapid transition to a restructured program. This would represent one-time funding to initiate the transition from the status quo to a restructured observer program.

The Council also requests that NOAA provide for an ongoing annual appropriation of up to 50 percent of the cost of placing observers in any catch share program fisheries. This action would help to resolve the current inconsistencies in catch share funding within NMFS. We would like to achieve a more equitable balance between NMFS and industry funding applied across the NMFS regions.

Please consider these requests in your future budget formulations, specifically in FY 2012 for purposes of the start-up funding request, as the Council continues to support moving forward with efforts to improve the North Pacific observer program to better meet evolving data and management needs. The Council is scheduled to take final action at its October meeting in Anchorage, Alaska, on this critically important restructuring program, and it would be helpful to understand whether NOAA intends to include our proposed funding in its future budget formulation. Please contact me, or our Executive Director, Mr. Chris Oliver, if you have any questions in this regard.

Sincerely,



Eric Olson  
Chairman,  
North Pacific Fishery Management Council

cc: Dr. Jane Lubchenco  
Dr. Jim Balsiger  
Dr. Douglas DeMaster  
Mr. Martin Loefflad  
Ms. Sue Salvesson  
Ms. Lisa Lindeman

Mr. Arne Fuglvog  
Mr. Bob King  
Mr. Dave Whaley



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
1315 East-West Highway  
Silver Spring, Maryland 20910

THE DIRECTOR

Mr. Eric A. Olson  
Chairman, North Pacific Fishery  
Management Council  
605 W. 4<sup>th</sup> Avenue  
Anchorage, AK 99501

RECEIVED

AUG 30 2010

AUG 27 2010

Dear Mr. Olson: *Eric*

Thank you for your letter regarding allocations of NOAA's appropriated funds for the North Pacific Fishery Management Council's efforts to restructure the North Pacific Groundfish Observer Program. NOAA's National Marine Fisheries Service (NMFS) appreciates that the fishing industry has provided substantial financial support for the existing observer program. The resulting data have been essential to the sustainable management of Alaska's fisheries.

NMFS also appreciates the Council's efforts to restructure the North Pacific Groundfish Observer Program to reduce sources of bias that jeopardize the statistical reliability of catch and bycatch data. The Council has requested Federal funds from NOAA for start-up funding to implement a restructured observer program in the North Pacific. While NMFS will consider this request for funding, the Council should include an option for utilizing the industry fee system authorized under section 313 of the Magnuson-Stevens Fishery Conservation and Management Act to fund the restructured program. In this context, we will review what means are available to support the Council's efforts.

The Council also requests an annual appropriation of up to 50 percent for catch share fisheries. While it is true that the current FY 2011 Budget request includes funding for observers under catch share management programs, this cost support for catch share programs is transitional in nature. In the New England and Pacific groundfish fisheries, the low catch levels resulting from the need to rebuild overfished stocks and/or end overfishing have resulted in an inability for the industry to pay the full costs of monitoring their fisheries. NOAA is providing transitional funding, generally for up to 3 years, while the economics of rebuilding affected fisheries improve. Long-term funding of observers is not planned for any of the fisheries that transform to catch share management. We expect industry to cover the observer requirements over time as stocks begin to rebuild and profitability increases under catch shares. This will enable us to both support the transition of additional catch share programs in the future and avoid creating a permanent and unnecessary subsidy where cost recovery is possible.

If you have any additional questions, please contact Mr. Chris Rilling, National Observer Program, at (301) 713-2367.

Sincerely,

Eric C. Schwaab

THE ASSISTANT ADMINISTRATOR  
FOR FISHERIES



DRAFT

**Observer Advisory Committee – Meeting Report**  
**September 28 – 29, 2010**  
Birch/Willow Room, Hilton Hotel  
Anchorage, AK  
8:30 am – 4:30 pm (Tues); 8:30 am – 12 pm (Wed)

**Committee present:** Cora Campbell (co-Chair), Bill Tweit (co-Chair), Bob Alverson, Christian Asay, Julie Bonney, Richie Davis, Kenny Down, Michael Lake, Todd Loomis, Paul MacGregor, Tracey Mayhew, Brent Paine, Theresa Peterson, Kathy Robinson, Anne Vanderhoeven. Not present: Matt Hegge, Jerry Bongen.

**Council and NMFS Staff:** Nicole Kimball (NPFMC), Darrell Brannan (NPFMC, consultant), Chris Oliver (NPFMC), Martin Loefflad (AFSC), Craig Faunce (AFSC), Patti Nelson (AFSC), Jennifer Cahalan (AFSC), Sally Bibb (NMFS).

**Other participants:** Josh Boyle (USCG), Karla Bush (ADF&G), Ruth Christiansen (ADF&G), Julianne Curry (PVOA), Ed Dersham (NPFMC member), Jane DiCosimo (NPFMC staff), Ed Hansen (fisherman), Kathy Hansen (SE AK Fishermen's Alliance), Jim Hubbard (Kruzof Fisheries LLC), Rhonda Hubbard (Kruzof Fisheries LLC), Dan Hull (NPFMC member), Nathan Lagerwey (NOAA OLE), Ellen Lance (USFWS), Stefanie Moreland (ADF&G), Kris Noroz (Icicle Seafoods), Mary Schwenzfeier (ADF&G), Lori Swanson (Groundfish Forum), Gregg Williams (IPHC).

## Agenda

- I. Review and approve agenda
- II. Review June 2010 Council action and current suite of alternatives
- III. Review public review draft analysis to establish a new program for observer procurement and deployment in the North Pacific Groundfish Observer Program (i.e., restructuring)
- IV. Discuss feedback and/or recommendations on the analysis
- V. Overview of the NPRB-sponsored electronic monitoring study in the commercial halibut fishery (IPHC and NMFS). Preliminary discussion of electronic monitoring applications in North Pacific fisheries as appropriate, and direction for this agenda item at the February 2011 Council meeting.
- VI. Scheduling & other issues

### I. Review and approve agenda

Introductions were made, and the agenda was approved. Staff outlined the schedule for the analysis and confirmed that the purpose of the meeting is to provide feedback to the Council on the public review draft analysis for the October 2010 Council meeting, at which the Council is scheduled to take final action on observer restructuring. The committee understood they were not tasked with recommending a preferred alternative.

### II. Review June 2010 Council action and current suite of alternatives

Nicole Kimball (NPFMC) reviewed the June 2010 Council action, in which the Council reviewed the initial review draft analysis for restructuring the observer program and the May 2010 OAC report. The Council motion concurred with OAC recommendations regarding further development of the analysis and released the analysis for public review subject to several revisions and additions. The Council also approved two new options in June, which are applicable to all of the action alternatives (Alt. 2 – 5). Option 1 would assess half of the ex-vessel value fee selected under a preferred alternative on halibut landings and on groundfish landings from vessels <60', <50', or <40'. Option 2 would require NMFS to

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submit an annual observer sampling design and deployment plan, for review by the Plan Teams and SSC, and approval by the Council. Staff noted that the overall alternatives have not changed since the June version of the analysis, but new analysis of both Option 1 and 2, along with the other Council requests, are included in the public review draft for October.

In June, the Council also tasked the OAC, Council staff, and NMFS to develop electronic monitoring as an alternative tool for fulfilling observer coverage requirements with the intent that it be in place at the same time as the restructured observer program (scheduled for no earlier than 2013). Finally, the Council approved a motion to write a letter to NOAA HQ to request Federal funds for start-up funding to implement a restructured observer program in the North Pacific, as well as an annual appropriation of up to 50% of the cost of placing observers in any catch share program fisheries. This letter was sent on June 30, and a response was received from Eric Schwaab, Assistant Administrator, on August 30. Both letters were provided to the committee. The committee agreed that continued efforts on the part of NMFS and industry are necessary to secure Federal funding, and that start-up funding for the restructured program should be a high priority.

### **III. Review public review draft analysis to establish a new program for observer procurement and deployment in the North Pacific Groundfish Observer Program (i.e., restructuring)**

NMFS and Council staff (Nicole Kimball, Darrell Brannan, Martin Loefflad, Craig Faunce) provided a detailed presentation of the public review draft analysis, focused primarily on the changes from the initial review draft in the Regulatory Impact Review (Chapter 2); the sample design and deployment sections (Chapter 3); and start-up funding (Chapter 3). The committee limited its discussion during the presentation to brief statements and clarifying questions, with the intent to have more in-depth discussion and feedback after the presentation.

The **executive summary and Chapter 1** outlined the layout of the analysis, including the problem statement and suite of alternatives. Staff presented the fundamental concepts proposed in the analysis and the primary decision points under consideration by the Council in October, including the scope of the action (i.e., which fisheries/sectors are included in restructuring). It was reiterated that if a groundfish vessel carries an FFP, they are included in the program if the species comes off a Federal TAC. Halibut and sablefish IFQ are included (regardless of whether operating in State waters or carrying an FFP) and State-managed, Guideline Harvest Level (GHL) species are not included.

Darrell Brannan presented **Chapter 2** (RIR), including the 2009 groundfish ex-vessel price data, which were requested to be added to the analysis if available. Staff requested the data from CFEC, but final COAR data are not available until October, so could not be included in a comprehensive way in the RIR. However, staff included 2009 statewide average prices in a comparison of CFEC ex-vessel prices in Appendix 5 to show differences between the average statewide landings tax price and the prices as calculated in the analysis. It was noted that although the COAR data are the basis for both calculations, the State landings tax methodology uses landed retained catch to determine prices, and the analysis uses landed catch for shoreside deliveries (including plant discards) and total catch for CPs. One member asked whether NMFS could calculate standardized ex-vessel prices for catcher vessels based only on CV landings, and exclude CPs and motherships from the calculation. In effect, that is the method used in the analysis to-date, as the CFEC data are refined by port, and staff was directed to calculate prices based on port or port group. CPs and motherships represent distinctive 'ports' in the data, so in calculating prices, only shorebased ports were included for determining prices for CV landings.

In addition, 2009 statewide average prices were provided in the discussion about whether to use a rolling average price as opposed to an annual price (p. 70, Figure 4). While the overall 2009 revenue estimate

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falls slightly below 2008 levels, it remains above previous years. The committee noted that such a trend is evident regardless of whether 2009 data are provided: in a fee system based on ex-vessel revenues, there are going to be years (due to reduced prices or TACs) in which revenues collected for observer deployment will be reduced. One concern is that an observer fee program based wholly on ex-vessel revenues (e.g., Alternative 5) may not provide sufficient revenues for optimal deployment.

Staff also noted that Appendix 5 responds to the Council's request to assess whether it would be feasible and/or more efficient to use the State of Alaska (Department of Revenue) as the observer fee collection agent, under contract to NMFS. Upon review, the committee did not appear to support this concept. It was noted that the State would need to be paid for this service, which the ex-vessel fee revenues could support (thus reducing the number of observer days). Others noted that the approach in the analysis is to integrate the fee liability into elandings, which makes it simple for harvesters and processors to understand the fee amount at the point of landing, with one automated invoice provided to processors at the end of the year. Thus, the existing Federal infrastructure may be simpler than the manual form provided by the State (to collect landings taxes). One member noted that the estimated cost for NMFS to collect fees seems reasonable (\$15 per invoice processed electronically), and that NMFS has previous experience with fee collection under the existing cost recovery fee programs for halibut and crab.

Staff also outlined the changes in the estimated cost of an observer day under a restructured program between the June initial review analysis (\$450/day) and the current analysis (\$467/day), which affects the cost estimates throughout the RIR (see Appendix 6). Shortly after the June Council meeting, the Dept of Labor issued a wage determination for Alaska observers, due to a new contract in the marine mammal program. The committee questioned whether new wage determinations are made on a regular basis. Staff responded that they are not done annually or on a schedule, they are typically made whenever a substantive contract is being let.

Staff reviewed other changes to the RIR based on either the June Council motion, or specific discussions and requests from the Council in June. For example, the Council provided direction to: use nominal prices; use regional halibut and sablefish prices published by RAM; and treat halibut vessels as a CP or CV based on historic activity for the purposes of the estimates, not quota share designation. Regarding this last point, the committee discussed the proposal to use the Federal Fisheries Permit (FFP) designation to determine whether a vessel is a CP or CV in the future under a restructured program. The analysis proposes that a person could choose their operating type on their FFP and that designation would feed into the sample design and determine their coverage and fee system for either the year, or the duration of the permit. While this is feasible for the groundfish sector, the committee noted that there is a subset of the IFQ fleet that fishes only in State waters and is not required to hold an FFP, thus the use of an FFP to both determine the vessel/trip selection pool and the operating type designation would not work for these vessels. Staff would need to determine a different method by which to identify these vessels for selection.<sup>1</sup> One member noted that, in terms of halibut CP activity, there are a few vessels that act as a CP for a short period during the year. If these vessels are required to designate themselves as a CP or CV for the entire year, they would determine which designation is the most cost effective for them, depending upon the preferred alternative.

Staff then outlined the cost tables in the RIR which estimate how much revenue would be generated under a 2% fee under Alternatives 2 – 5 (the upper bound of the potential fee), the number of observer days that

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<sup>1</sup>Given this discussion, after the OAC meeting, staff requested NMFS RAM Program to determine the universe of vessels that do not carry an FFP and fish halibut and/or sablefish IFQ only in State waters. As of 2010, 556 halibut (IFQ/CDQ) vessels and 7 sablefish IFQ vessels fit these criteria. Note that 86 halibut (IFQ/CDQ) vessels and 2 sablefish vessels fit these criteria and are also >40' LOA. (In the initial year(s) of the program, fixed gear vessels <40' would not be selected for observer coverage.) One possibility is for NMFS to use the list of ADF&G numbers assigned to these vessels from the previous year, to help establish the pool for vessel selection in the deployment year.

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could be funded by that revenue, and how both observer days funded and total costs compare to the status quo. These tables show the cost of the restructured portion of the program, as well as the cost of the portion of the program that remains under status quo (applicable to Alt. 2 and 3). These tables are also provided for all of the action alternatives with the inclusion of Option 1, assuming that the reduced fee under Option 1 would equal 1% of ex-vessel revenue. It was clarified that the primary cost tables in the RIR use average revenues during 2005 – 2008, while the sector-specific tables in Appendix 11 are based solely on 2008 data. The committee recognized that Alternatives 2 – 4 (excluding Option 1) are estimated to fund about 9,000 more observer days than the number of days under the status quo (~39,000), while Alternative 5 results in a surplus of about 600 days (using mean estimates). The lower estimate (minus one standard deviation) for Alternative 5 results in 5,000 fewer observer days than status quo. All alternatives increase costs compared to the status quo (2008 = \$14.4 million).

Staff also reviewed Section 2.10.7, which evaluates effects on harvesters, processors, and communities. One of the primary issues discussed was the intended 50:50 split of the ex-vessel fee between harvesters and processors, and the assessment that harvesters would likely bear a higher portion of the ex-vessel fee, due to higher inelasticity in the supply side of the market compared to demand. Crew members may also realize a reduced share as a result of an observer fee. One committee member stated that the effect of the fee assessment on crew depends on the fee remittal process. If captains and boat owners do not see the expense directly and the processor remits the fee, the effect is a lower price for fish, and revenue available for the entire captain and crew would be reduced in that manner. This is opposed to a vessel paying NMFS directly after each trip. Staff also presented the indirect effects and costs, such as space and safety requirements for small vessels.

AFSC staff (Martin Loefflad, Craig Faunce) presented **Chapter 3** on sample design and implementation issues, focusing on additions to the document since June. Staff outlined the two primary sampling principles: the more you sample, the more you know; and randomization helps ensure that collected data are unbiased and representative. Staff also presented a description of current observer program sampling (Table 57) and outlined Appendix 8, which describes the two potential sources of observer bias: deployment effect (non-random deployment of observers in fisheries based on quarter) and observer effect (observed trips do not represent unobserved trips).

Staff then reviewed the strata proposed initially for observer deployment on vessels, which did not change from the June analysis (Tables 59 and 60). The OAC asked for the number of catcher processors that do not currently have 100% coverage requirements that would be required to be in the full coverage stratum under restructuring. Staff responded that two vessels would potentially move from 0% to 100% coverage, and 24 vessels would move from 30% to 100% coverage. The OAC had a lengthy discussion of Section 3.2.7.3, which outlines contingencies and details regarding the selection method (vessel vs trip), and attempts to establish some concrete terms around both the selection process and the criteria for a potential exemption from observer coverage for a given time period. For the universe of vessels subject to a vessel selection process (fixed gear CVs >40' - <57.5'), NMFS would contact a vessel 1 – 2 months in advance if they have been selected to take an observer. If selected, the vessel must notify NMFS at least 72 hours in advance of each trip in the selected time period (NMFS proposed 3 months). Selection would be 'with replacement', meaning the same pool of vessels would be used for random selection in each quarter.

NMFS and the OAC had considerable discussion of the key factors to be used in determining whether a vessel can carry an observer (p. 150). If a vessel is selected and requests an exemption from observer coverage, that vessel would need to be willing to use EM as an alternative, when the technology is available. Staff noted that EM is well-suited for various platforms as a compliance tool where there is no discard requirement. It has also been demonstrated for use in species-specific counts on some operations (e.g., hook-and-line fishery), but one of the primary issues to resolve is how to rapidly extract the data for use in inseason management. This may not be necessary for fisheries in which fishing mortality is



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assessed at the end of the year, but highlights how EM needs to be designed to meet the monitoring needs and objectives in a specific fishery. Committee members delayed further discussions of EM until the relevant agenda item the following day.

While it is clear that NMFS is addressing the deployment effect through the proposed action, the committee had requested that staff provide suggestions for ways to mitigate the observer effect, or 'gaming' of the system. NMFS outlined two potential rules that could be established in regulation to reduce gaming (pp. 153 – 154): if a vessel/trip were selected, the vessel could not leave the dock without the observer (subject to a reasonable stand-down period but not preventing the vessel from fishing if the observer is not available); and to assign an observer's deployment as the time from first departure until the full offload of the catch, which may make it necessary to prohibit partial offloads (as a vessel could artificially shorten its trip by partially offloading a few pounds and returning to sea without the observer). Other recommendations were provided as internal policy rules, which would remain flexible in order to address problems as they arise. One member questioned whether these should be flagged as Council decision points; staff stated they would highlight these issues in the Council presentation.

NMFS staff then outlined the proposed observer program levels: none, pilot/developing, mature, and optimized, and how to define deployment under those categories (Table 64). Questions used in the allocation strategy include whether prior data are available, and if so, is a performance standard defined. NMFS set a performance standard for estimating at-sea discards in the national bycatch strategy published in 2004, which is recommended as a target for the proposed program. For fishery resources, excluding protected species caught as bycatch, the precision goal is 20% – 30% coefficient of variation (CV) for estimates of total discards for the fishery, or if total catch cannot be divided into discards and retained catch, then the goal is a 20% – 30% CV for estimates of total catch.

Staff presented a summary of previous work that estimates the necessary sampling fraction (expressed as percent coverage rate) to meet the goal of a 20% - 30% CV (Table 61). Two primary conclusions result: the coverage required for any CV performance standard varies widely between species, with common species requiring less coverage than rare species; and estimates of required coverage for the same species in a fishery are similar between the studies presented. In sum, using some necessary assumptions, the least conservative estimate may be to apply a 30% CV for 50% of the listed fisheries, resulting in a 30% coverage recommendation for fisheries in the partial coverage stratum (this is termed P2 deployment throughout the analysis). The strategy would be to start at P2 deployment and as data are obtained through the newly restructured program, the goal would be a 20% - 30% CV. Staff noted that while each alternative combined with Option 1, with the exception of Alternative 5, is estimated to provide sufficient revenue to fund *more observer days* than the status quo, no alternative combined with Option 1 provides sufficient revenue for the target *P2 deployment levels*.

NMFS also presented the analysis of Option 2, which requires an annual sampling design and deployment plan be submitted to the groundfish plan teams, SSC, and Council for review by September 1 each year, and the Council would have approval authority. It was discussed that the chart of observer program levels could be used in this review to show how the program is progressing towards a mature and optimized program over time. In addition to a proposed plan for the coming year, the report would show how funds were used and observers deployed in the previous year. The committee supported the concept of Option 2, emphasizing that it is necessary for this level of public, agency, and Council review in order to determine priorities for observer coverage. The committee also discussed issues related to the requirement for Council approval, recognizing contracting obligations and the risk that a new deployment plan, based on the previous year's information, would not be in place at the start of the year if the Council did not approve the plan. However, the committee agreed that a feedback loop is necessary and discussed replacing the language in Option 2 to require consultation with, not approval by, the Council.

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Finally, staff presented estimates of the start-up funding necessary under each alternative, should Federal funding not be available (Table 65). The committee noted that Alternatives 2 and 3 take a significantly shorter time to generate start-up funds than Alternatives 4 and 5. The basic approach proposed to generate industry start-up funds is similar to the 1995 research plan, in which operations were required to pay for their observer coverage under status quo requirements plus the fee assessment, then credited the difference between the two in order to avoid 'double charging' an operation. Thus, if an operation paid more under the status quo than the cost of a 2% ex-vessel fee, they would not pay anything above their status quo costs in year-0. While the analysis does not detail the exact implementation of the research plan approach, and could differ in some respects, the overall concepts (not double-charging, crediting back a vessel's actual observer costs) would apply. The discussion illuminated the numerous complexities of assessing a fee in year-0 to generate start-up funds, and the strong desire for Federal funds to negate the need for this process and relieve the cost burden to industry. Members noted that Alternative 3 would require \$5 - \$6 million to meet P2 deployment levels, and industry should lobby Congress and NOAA to provide these funds.

#### IV. Discuss feedback and/or recommendations on the analysis

The committee was not tasked with recommending a preferred alternative, but provided comments throughout the meeting on the advantages and disadvantages of particular alternatives. The committee focused its discussion and recommendations on the following issues:

1. Start-up funding
2. List of Council decision points in executive summary
3. Mixed trips (e.g., troll caught fish and IFQ halibut during same trip)
4. Rules associated with deployment: no observer/no fishing; and trip starts with leaving the dock and ends with full offload
5. Option 2: annual observer program sampling design and deployment plan
6. Role of the OAC in development and review of rulemaking

##### 1. Start-up funding

The committee questioned why it would only take a half year to generate sufficient funding for the first year of deployment, since fee collection was proposed to start in mid-2012, and recognized what limited coverage that would buy in year-1. Most members agreed that while the program could potentially get underway without the full year's funding, especially if Federal funding became available, it does not make sense to start the program at such a limited scope (coverage levels lower than status quo) and that at least a full year's funding should be collected prior to deployment under a new program. In effect, fee collection could start at the beginning of 2012, for deployment in 2013, or it could start in 2013, for deployment in 2014, under Alternatives 2 or 3. Members also emphasized that initiating a new fee collection system mid-year is likely problematic and confusing for industry. **The OAC recommended starting fee collection in the first full calendar year after the final rule is published.**

##### 2. List of Council decision points in executive summary

The committee reviewed the list of decision points for consideration by the Council, and provided feedback on each, with the exception of the preferred alternative and the fee percentage.

##### *Two tier system for general coverage categories*

The committee did not make a recommendation on this decision point, but discussed the proposed strata and impacts on various sectors.

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### *Use of a rolling average price versus an annual price to calculate the annual ex-vessel fee*

One member supported using an annual price, and was not concerned with NMFS' desire to smooth out revenues by using a rolling average price. Other members noted that current year's prices would not be applied to current year's landings regardless. Due to data availability, IFQ prices would be from the previous year, and groundfish prices would be from two years prior. A few members supported using a three-year rolling average, noting that if the agency can 'bank' some funds in the observer fund during years of high revenue, it may not be necessary to use a rolling average. Most members did not have a position on this issue.

Several members questioned why the fee percentage must be established in rulemaking and only changed with subsequent notice-and-comment rulemaking, as opposed to 'frameworking' the fee such that it could be adjusted annually. Others questioned whether, if NMFS had the authority to collect the full 2% fee, NMFS could choose not to collect the maximum amount in any given year. While NOAA GC has stated that frameworking the observer fee is not possible (see Section 2.9.2.2.2), a response was not provided regarding whether NOAA would be obligated to collect a 2% fee each year if a surplus was collected in previous years or a lower fee percentage was sufficient to meet deployment needs. Another member supported rulemaking that would set the initial fee at 2%, but require that Option 1 be applied after a specified time period (X years).

### *Exclusion of state water GHL fisheries from the restructured program*

There was no support for including State water GHL species in the restructured program, regardless of whether the vessel is carrying an FFP or whether the Federal authority exists to assess a fee on such landings. One member noted that if the state wants to pursue its own observer program with specified objectives, it should be developed through the Board of Fisheries and/or the Joint Protocol Committee.

### *Whether catcher vessels that deliver unsorted cod ends to a mothership are subject to the ex-vessel fee*

The committee agreed with the current approach in the analysis to not assess a fee or require observer coverage on vessels delivering unsorted cod ends at sea to a mothership (or CP acting as a mothership). Motherships would continue to have 100% coverage and all catch would be observed from that platform. This mirrors the status quo.

### *How to define a catcher processor*

Upon implementation, analysts recommend using the FFP designation to define a CP for the  $\geq 100\%$  coverage stratum. That method would allow the permit applicant to choose the designation for future fishing years. The committee noted that one can currently change their FFP designation mid-year and that the proposal would require that a vessel retain the same designation at least annually, if not for the entire 3-year permit period. Questions arose as to why a vessel could not start the year designated as a CV and then modify its designation to a CP for some trips during the year. The problem is that the CV/CP designation denotes the coverage rate (and the type of fee assessed under Alternatives 3 and 4), and the coverage rate is the effective sample over the number of trips. If a vessel can change its designation throughout the year, the population of vessels or trips sampled is changing over time, which makes it difficult to ensure a statistically valid sample.

Members noted that vessels will make the operating type decision based on the most cost effective system for each individual operation. If processing is a small part of their operations, they may choose a CV designation and avoid 100% coverage requirements. Others may determine (under Alternative 3 for example) it is cheaper to carry an observer 100% of the time they are operating in Federal fisheries and pay a daily rate to an observer provider, as opposed to paying a 2% fee on landings. The committee noted that there are very few halibut CPs, but they may choose to pull out of the pool for the fee program and opt to pay a daily rate. The committee also discussed the necessity of a permit other than the FFP to use for vessel selection and CP designation, for the subset of IFQ vessels that only fish in State waters and do

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not carry an FFP. Staff is considering other alternatives to identify these vessels for selection.

### *Development of standardized ex-vessel prices to apply to (non-IFQ) groundfish landings to determine the ex-vessel value fee*

Members generally supported using the CFEC approach proposed in the analysis to establish groundfish ex-vessel prices and did not support the more aggregated approach (which is not sensitive to gear type or port) used by the Alaska Dept of Revenue to assess the State landings tax. The committee also did not support using the Dept of Revenue as the fee collection agent.

### *Apply the annual IFQ price, developed for the cost recovery program, by port or port group from the previous year to determine IFQ ex-vessel observer fees*

The committee agreed with this approach.

### *Start-up funding*

See previous discussion under #1.

### 3. Mixed trips (e.g., troll caught fish and IFQ halibut during same trip)

Members discussed the potential inefficiencies inherent in a program that (randomly) selects vessels or trips that are targeting multiple species, both included in and excluded from the program. A southeast Alaska member stated that at least 20% of the Area 2C and 10% of the Area 3A halibut trips are conducted in conjunction with salmon fisheries (which are not included in restructuring). If a trip is defined as when an observer gets onboard until the catch is delivered, those trips are going to be inefficient in terms of observer deployment, as the observer will be onboard for the entire trip, even if halibut is a very small part of the trip (vessels are required to keep halibut caught during those trips if there is halibut IFQ available). One member discussed whether there should be criteria established such that those vessels would not be considered for selection, given the potentially low catch and the inefficiencies inherent in such a deployment.

Staff responded that many of the vessels at issue are <40', for which there would be no selection in the initial year(s) of the program. Fixed gear vessels 40' – 57.5' would be in the vessel selection system, by which they would be selected for coverage for a (3-month) period and must notify NMFS prior to each trip in that period. Like status quo, it is expected that some trips will have low catch and/or bycatch and some will have high catch and/or bycatch. While it may not be the most efficient use of an observer to sample on these trips, it is necessary to include all trips in the pool to provide a representative sample, and the sample design can only be based on variables that are known before a trip starts (i.e., whether a person decides to set gear for halibut mid-trip cannot be known before the trip begins). In addition, the criteria for 'no selection' and 'vessel selection' would likely evolve over time, as new data are collected.

NMFS noted that the likely approach is to move into the new, small boat fleets in a slow, step-wise manner, working closely with the vessels and captains that are initially selected in the first few years of the program. At the same time, the agency needs to be cognizant of creating rules (or exceptions) that provide incentives to game the system (e.g., having salmon gear on board, with the potential for a 'mixed' trip, warrants an exemption from observer coverage).

One member noted that selected vessels will likely fish differently when they take an observer. They may choose to fish all of their halibut IFQ while an observer is assigned to them, and thus when they salmon fish later in the year (with no observer requirement), they will have to release any halibut bycatch because they will not have any IFQ remaining. Other members noted that the proposed program design would allow NMFS to observe both typical and atypical trips. This means there is some inherent inefficiency,

but the transparency and review process associated with an annual sampling and deployment plan should serve to make the program more efficient over time.

4. Rules associated with deployment

The committee agreed that some rules to mitigate ‘gaming’ the system are appropriate to put in regulation, and did not generally object to the two proposed by NMFS. These include: 1) if a vessel/trip were selected, the vessel could not leave the dock without the observer (subject to a reasonable stand-down period but not preventing the vessel from fishing if the observer is not available); and 2) to assign an observer’s deployment as the time from first departure until the full offload of the catch. However, the OAC recommended allowing NMFS to use its discretion to develop other internal policy rules (not in regulation) to respond to situations as they arise. Members recommended using the committee to assist in developing both the rules placed in regulation and the internal control rules; for example, the committee could provide input as to a reasonable stand-down period necessary before a vessel can leave the dock.

5. Option 2: annual observer program sampling design and deployment plan

The OAC fully supported Option 2, with the exception of the ‘approval’ mechanism. Members recognized that the primary goal is to make the sample design flexible, and while transparency and the ability to provide input as to the sampling and research priorities is fundamental to its success, they were concerned that an approval mechanism may negate this important goal. Members supported modifying Option 2 to reflect that Council ‘consultation’ is required, as opposed to approval.

The OAC also recommended that it be able to review the sampling and deployment plan required under Option 2 on an annual basis. The committee discussed meeting once a year (September) to review the plan, in order to provide feedback from their respective members on the program. In addition, members want to be able to provide input from communities and the small boat fleet regarding how the new deployment strategy is working in that sector.

The committee also recommended that the Council appoint observer program staff to the GOA and BSAI Plan Teams, in order to explain the observer data, including the variance associated with, and limitations of, the data. As an alternative, the observer program could ensure that staff attend the meetings.

6. Role of the OAC in development and review of rulemaking

The OAC discussed what factors would affect the speed of the rulemaking: staff availability, priorities of agency and Council, complexity, and legal issues. The OAC stressed that the rulemaking should be a priority of the Council and NMFS, and discussed whether the committee would want to have a role in troubleshooting implementation issues and reviewing the draft rulemaking as it progresses. While a significant portion of the implementation issues are provided in the analysis, the committee and staff recognized several implementation and logistical issues would not be fully fleshed out until the proposed rule. Members agreed that they would like to continue the open communication and transparency employed throughout the process thus far, and thought the OAC would serve to develop a better product (rule) in the long-run.

**In summary statements, committee members that supported a specific alternative supported Alternative 3.** They noted that this is a long overdue problem which needs to be addressed to improve data quality, and Alternative 3 solves the most pressing data quality and flexibility issues without risking reduced coverage in the sectors that are determined to need  $\geq 100\%$  coverage. There were concerns with Alternative 2 not capturing the entire subset of vessels in the partial coverage stratum under a new program. Alternative 5 was noted as taking too long to generate start-up funds, if start-up is industry-

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funded. There is also a risk that it would not generate sufficient funding to cover the  $\geq 100\%$  sectors, or only be able to cover them at the expense of coverage in the  $< 100\%$  sectors. One member noted that Alternative 3 is not a 'pass' for the catcher processor sectors, as they would all move into the 100% coverage stratum and pay directly to observer providers. As discussed previously, several CPs would be moving from 30% to 100% coverage requirements.

One member noted that if the Council determines a 2% ex-vessel fee is warranted in the initial years of the program, it could structure its motion such that Option 1 takes effect after a few years, to automatically reduce the fee for the specified sectors. This would allow the agency to generate sufficient start-up revenue, and promote efficiency within the program as it evolves.

Other members stated support for the proposed approach, especially compared to the approach employed in 1995 under the research plan. The requirement to pay both the status quo costs and the fee percentage for several years to generate start-up funds was noted as a primary factor in the research plan's failure, which stresses the need to receive Federal funds for start-up. One member related that the start-up funding provided in the west coast catch share program was a significant factor in gaining industry support for the observer program requirements that were included in that program.

Observer providers present stated that they did not consider the 'hybrid' status of Alternative 3 a significant issue. Any new program will require additional communication and a learning curve to increase efficiency, but most providers are experienced at tracking separate programs under the status quo (e.g., providing observers for groundfish, marine mammal program, crab, etc.)

**The public was also provided an opportunity for comment at the meeting.** Public comment was provided by Julianne Curry, Rhonda and Jim Hubbard, and Dan Hull. Public comment centered on the need to involve industry in figuring out how the IFQ fleet can fit into the proposed program. It also focused on the importance of the annual report required under Option 2. Comment was provided on the desire to avoid setting a fee percentage in regulation that could not be revised unless through subsequent rulemaking. Comment also noted that the Council should ensure that industry not pay the bulk of the cost of the observer program, and to push for Federal funding. It was also noted that there are accredited surveyors who can do dockside boardings and qualify a vessel for a USCG safety decal; a USCG person is not the only means to acquire this inspection.

### **V. Overview of the NPRB-sponsored electronic monitoring study in the commercial halibut fishery (IPHC and NMFS)**

Gregg Willams (IPHC), Jennifer Cahalan (NMFS AFSC) and Martin Loefflad presented a summary of the EM study recently completed in the halibut fishery. Presenters noted that the final report is with the NPRB and not yet approved, but is expected to be released soon. A formal and comprehensive presentation is planned for the Council at its February 2011 meeting.

This study was intended as a field test of EM technology for use in identifying bycatch in the commercial halibut fishery. Four commercial halibut vessels were used (volunteers), and the study was conducted over 13 trips (250+ sets). Both EM and observers were on the vessel, and the purpose was to compare the observer reported data with EM. The primary questions included: 1) whether observers and EM are identifying the fish as the same species, and 2) whether observers and EM are identifying the same numbers of fish. These comparisons were made by aligning the two data sets by each hook, in which the species and the disposition of the catch (e.g., landed, dropped off, discarded) were identified. Only complete records were used for the comparison.

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Results show that there were a high proportion of hooks with agreement on species identification for fish only (91% total; 26,000+ hooks). For bycatch only, there was near complete agreement at the species group level (rockfish, sharks, skates, flatfish, etc) (99%), but less agreement at the species specific level (81%). Image quality did not appear to affect the results significantly. Both observers and EM are counting the same number of fish in most cases, no statistical significance resulted in the differences.

The summary conclusions were as follows:

- Both EM and observer monitoring have errors
- Neither method monitored all fishing events
- Adequacy of EM monitoring was not dependent on size of catch
- Species ID of catch was statistically unbiased; some species only identified to species grouping
- EM is an additional tool for catch monitoring (potential dependent on specific monitoring goals. Note that no weights were obtained using this EM configuration)
- EM is not an alternative to observers for the collection of biological specimens

Committee members asked about the length of time required to review data (about 65% to 75% of real-time). They also clarified that it was not an objective of the study to determine which method (EM or observer) was more accurate; the purpose was to compare the differences in the estimates. One member suggested that biological samples could be taken by industry, and EM (cameras) could be used to confirm that the crew did so. The committee was also concerned with a cost comparison of the two systems, which was not available.

Staff summarized next steps for the committee, noting that NMFS is developing a white paper synthesizing previous experience and studies with regard to EM for the Council in February 2011. The OAC recommended that it review that paper after the February Council meeting, and help focus the issue on a particular problem (e.g., how to implement an EM design for the small boat fleet).

## VI. Scheduling and other issues

The committee reviewed the timeline for implementation (Section 3.7), which details the Council, rulemaking, and contracting timeline associated with observer restructuring. Council final action is scheduled for October 2010, with the associated rulemaking developed through 2011. Development of a contract of this projected scope is about two years to completion, with the potential implementation of a newly restructured observer program in 2013, depending upon the preferred alternative and the availability of start-up funding to initiate contract task orders. Staff noted that, based on previous discussions, one could expect to start collecting funds in 2012 or 2013 (year-0), for implementation in 2013 or 2014 (year-1 of restructured program), depending upon the preferred alternative.

**Depending upon the Council's action in October, the OAC recommended that it convene after the February 2011 Council meeting, in order to focus efforts on development of an electronic monitoring system for small vessels.** One member noted the potential for increased participation from the small boat fleet if the meeting is held prior to the halibut season, which typically starts in early March. The intent would be to meet the Council's request that an EM program be in place for specified sectors at the same time that a restructured observer program is implemented. The committee could assist in determining the sectors in which to focus an EM design, and the sampling and monitoring problems to resolve. Should the Council take final action on observer restructuring, the OAC also stated an interest in reviewing the drafts of the proposed rule in an iterative process, when available in the future.

Alternative 3 (2% fee), with Option 1 applied to all catcher vessels <60' LOA (1% fee)

NOTE: Assumes no observer deployment in <40' sectors

| Sector  | Fee Structure |      | Sea-days realized |               |               | Number of Participants |      |       | Cost 2008           |                      |                      |
|---|---------------|------|-------------------|---------------|---------------|------------------------|------|-------|---------------------|----------------------|----------------------|
|   | GOA           | BSAI | GOA               | BSAI          | Total         | GOA                    | BSAI | Total | GOA                 | BSAI                 | Total                |
| AFA CPs   | 366           | 366  | 0                 | 3,266         | 3,266         | 0                      | 17   | 17    | \$ -                | \$ 1,195,356         | \$ 1,195,356         |
| CPs in GOA Rockfish Pilot Program                         | 366           | 366  | 77                | 0             | 77            | 7                      | 0    | 7     | \$ 28,182           | \$ -                 | \$ 28,182            |
| Sablefish CPs >= 60'                                      | 366           | 366  | 1,008             | 995           | 2,003         | 10                     | 15   | 18    | \$ 368,758          | \$ 364,173           | \$ 732,931           |
| Sablefish CPs 50' - 59.9'                                 | 366           | 366  | 113               | 20            | 133           | 1                      | 1    | 2     |                     |                      |                      |
| Halibut IFQ CPs   | 366           | 366  | 79                | 76            | 155           | 6                      | 3    | 7     | \$ 28,905           | \$ 27,889            | \$ 56,794            |
| Non-Specified Trawl CPs >=60'                             | 366           | 366  | 557               | 4,714         | 5,271         | 14                     | 22   | 24    | \$ 203,862          | \$ 1,725,324         | \$ 1,929,186         |
| Non-Specified Fixed Gear CPs >= 60'                       | 366           | 366  | 619               | 7,497         | 8,115         | 17                     | 42   | 43    | \$ 226,497          | \$ 2,743,758         | \$ 2,970,255         |
| Fixed Gear CPs 50' - 59.9'                                | 366           | 366  | 139               | 29            | 168           | 2                      | 1    | 2     |                     |                      |                      |
| Catcher Vessels in GOA Rockfish Pilot Program             | 366           | 366  | 311               | 0             | 311           | 26                     | 0    | 26    | \$ 113,826          | \$ -                 | \$ 113,826           |
| Sablefish IFQ CVs >= 60'                                  | 467           | 467  | 669               | 476           | 1,145         | 42                     | 13   | 51    | \$ 416,104          | \$ 46,362            | \$ 462,466           |
| Sablefish CVs 50 - 59.9'                                  | 467           | 467  | 1,021             | 262           | 1,283         | 97                     | 11   | 104   | \$ 281,554          | \$ 31,371            | \$ 312,925           |
| Sablefish CVs 40 - 49.9'                                  | 467           | 467  | 257               | 81            | 338           | 51                     | 3    | 52    | \$ 46,126           | \$ 5,139             | \$ 51,265            |
| Sablefish IFQ CVs < 40'                                   | 467           | 467  | 99                | 0             | 99            | 16                     | 0    | 16    | \$ 9,210            | \$ -                 | \$ 9,210             |
| Halibut IFQ CVs >= 60'                                    | 467           | 467  | 879               | 152           | 1,031         | 77                     | 27   | 83    | \$ 731,107          | \$ 146,772           | \$ 877,879           |
| Halibut IFQ CVs 40 - 59.9'                                | 467           | 467  | 5,873             | 512           | 6,384         | 537                    | 45   | 560   | \$ 858,614          | \$ 172,370           | \$ 1,030,983         |
| Halibut IFQ CVs <40'                                      | 467           | 467  | 5,957             | 6,330         | 12,287        | 463                    | 257  | 708   | \$ 231,876          | \$ 21,440            | \$ 253,316           |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 467           | 366  | 0                 | 5,763         | 5,763         | 0                      | 82   | 82    | \$ -                | \$ 2,109,258         | \$ 2,109,258         |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 467           | 467  | 760               | 993           | 1,753         | 20                     | 84   | 84    | \$ 124,039          | \$ 455,946           | \$ 579,985           |
| Catcher Vessels >= 60' trawl non-AFA                      | 467           | 467  | 1,382             | 1,207         | 2,589         | 25                     | 21   | 40    | \$ 520,733          | \$ 189,284           | \$ 710,017           |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 467           | 467  | 739               | 15            | 754           | 27                     | 3    | 27    | \$ 122,157          | \$ 7,087             | \$ 129,244           |
| Catcher Vessels >= 60' Fixed gear                         | 467           | 467  | 795               | 1,189         | 1,983         | 104                    | 74   | 138   | \$ 177,779          | \$ 293,236           | \$ 471,015           |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 467           | 467  | 1,891             | 464           | 2,355         | 293                    | 43   | 300   | \$ 165,017          | \$ 56,385            | \$ 221,402           |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 467           | 467  | 815               | 181           | 996           | 339                    | 20   | 347   | \$ 43,380           | \$ 11,115            | \$ 54,495            |
| Catcher Vessels < 40' Fixed gear                          | 467           | 467  | 415               | 148           | 563           | 491                    | 268  | 744   | \$ 14,750           | \$ 999               | \$ 15,748            |
| <b>Total CVs (excludes IFQ - halibut and sablefish)</b>   |               |      | <b>6,796</b>      | <b>9,959</b>  | <b>16,755</b> |                        |      |       | <b>\$ 1,167,855</b> | <b>\$ 3,123,310</b>  | <b>\$ 4,291,165</b>  |
| Processors Motherships AFA and Non-AFA                    | 366           | 366  | 73                | 465           | 538           |                        |      | 11    | \$ 26,718           | \$ 170,190           | \$ 196,908           |
| Shore-based/Floating processors (AFA)                     | 467           | 366  | 0                 | 779           | 779           |                        |      | 7     | \$ -                | \$ 285,114           | \$ 285,114           |
| Shore-based/Floating processors (non-AFA)                 | 467           | 467  | 5,204             | 1,180         | 6,384         |                        |      | 24    | \$ -                | \$ -                 | \$ -                 |
| <b>Total</b>  |               |      | <b>29,730</b>     | <b>36,793</b> | <b>66,523</b> |                        |      |       | <b>\$ 4,831,424</b> | <b>\$ 10,076,503</b> | <b>\$ 14,907,927</b> |
| <b>Total (restructured only) (467 cells)</b>              |               |      | <b>26,755</b>     | <b>13,189</b> | <b>39,944</b> |                        |      |       | <b>\$ 3,742,444</b> | <b>\$ 1,437,507</b>  | <b>\$ 5,179,951</b>  |



| Sector  | Observer Days Purchased (P1) |        |        | Rate Purchased P1 |      |       | Observer Rate Required |      | P2 Observer Days Required (P2) |       |       |
|---|------------------------------|--------|--------|-------------------|------|-------|------------------------|------|--------------------------------|-------|-------|
|   | GOA                          | BSAI   | Total  | GOA               | BSAI | Total | GOA                    | BSAI | GOA                            | BSAI  | Total |
| AFA CPs   | 0                            | 3,266  | 3,266  | 0.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 0                              | 3,266 | 3,266 |
| CPs in GOA Rockfish Pilot Program                         | 77                           | 0      | 77     | 1.00              | 0.00 | 1.00  | 1.00                   | 1.00 | 77                             | 0     | 77    |
| Sablefish CPs >= 60'                                      | 1,008                        | 995    | 2,003  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 1,008                          | 995   | 2,003 |
| CPs Sablefish CPs 50' - 59.9'                             |                              |        |        |                   |      |       | 1.00                   | 1.00 | 113                            | 20    | 133   |
| Halibut IFQ CPs   | 79                           | 76     | 155    | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 79                             | 76    | 155   |
| Non-Specified Trawl CPs >=60'                             | 557                          | 4,714  | 5,271  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 557                            | 4,714 | 5,271 |
| Non-Specified Fixed Gear CPs >= 60'                       | 619                          | 7,497  | 8,115  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 619                            | 7,497 | 8,115 |
| Fixed Gear CPs 50' - 59.9'                                |                              |        |        |                   |      |       | 1.00                   | 1.00 | 139                            | 29    | 168   |
| Catcher Vessels in GOA Rockfish Pilot Program             | 311                          | 0      | 311    | 1.00              | 0.00 | 1.00  | 1.00                   | 1.00 | 311                            | 0     | 311   |
| Sablefish IFQ CVs >= 60'                                  | 891                          | 99     | 990    | 1.33              | 0.21 | 0.86  | 0.30                   | 0.30 | 201                            | 143   | 344   |
| MGT CVs Sablefish CVs 50 - 59.9'                          | 603                          | 67     | 670    | 0.59              | 0.26 | 0.52  | 0.30                   | 0.30 | 306                            | 79    | 385   |
| Sablefish CVs 40 - 49.9'                                  | 99                           | 11     | 110    | 0.38              | 0.14 | 0.32  | 0.30                   | 0.30 | 77                             | 24    | 101   |
| Sablefish IFQ CVs < 40'                                   | 20                           | 0      | 20     | 0.20              | 0    | 0.20  | 0.30                   | 0.30 | 0                              | 0     | 0     |
| Halibut IFQ CVs >= 60'                                    | 1,566                        | 314    | 1,880  | 1.78              | 2.07 | 1.82  | 0.30                   | 0.30 | 264                            | 46    | 309   |
| Halibut IFQ CVs 40 - 59.9'                                | 1,839                        | 369    | 2,208  | 0.31              | 0.72 | 0.35  | 0.30                   | 0.30 | 1,762                          | 154   | 1,916 |
| Halibut IFQ CVs <40'                                      | 497                          | 46     | 542    | 0.08              | 0.01 | 0.04  | 0.30                   | 0.30 | 0                              | 0     | 0     |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 0                            | 5,763  | 5,763  | 0.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 0                              | 5,763 | 5,763 |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 266                          | 976    | 1,242  | 0.35              | 0.98 | 0.71  | 0.30                   | 0.30 | 228                            | 298   | 526   |
| Catcher Vessels >= 60' trawl non-AFA                      | 1,115                        | 405    | 1,520  | 0.81              | 0.34 | 0.59  | 0.30                   | 0.30 | 415                            | 362   | 777   |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 262                          | 15     | 277    | 0.35              | 1.01 | 0.37  | 0.30                   | 0.30 | 222                            | 5     | 226   |
| Catcher Vessels >= 60' Fixed gear                         | 381                          | 628    | 1,009  | 0.48              | 0.53 | 0.51  | 0.30                   | 0.30 | 238                            | 357   | 595   |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 353                          | 121    | 474    | 0.19              | 0.26 | 0.20  | 0.30                   | 0.30 | 567                            | 139   | 706   |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 93                           | 24     | 117    | 0.11              | 0.13 | 0.12  | 0.30                   | 0.30 | 244                            | 54    | 299   |
| Catcher Vessels < 40' Fixed gear                          | 32                           | 2      | 34     | 0.08              | 0.01 | 0.06  | 0.30                   | 0.30 | 0                              | 0     | 0     |
| Total CVs (excludes IFQ - halibut and sablefish)          | 2,501                        | 7,934  | 10,435 | 0.37              | 0.80 | 0.62  |                        |      | 1,914                          | 6,977 | 8,892 |
| Processors Motherships AFA and Non-AFA                    | 73                           | 465    | 538    | 1.00              | 1.00 | 1.00  | 0.00                   | 0.00 | 0                              | 0     | 0     |
| Shore-based/Floating processors (AFA)                     | 0                            | 779    | 779    | NA                | 1.00 | 1.00  | 1.00                   | 0.00 | 0                              | 0     | 0     |
| Shore-based/Floating processors (non-AFA)                 | 0                            | 0      | 0      | NA                | NA   | 0.00  | 0.30                   | 0.30 | 1,561                          | 354   | 1,915 |
| Total   | 10,989                       | 26,682 | 37,671 |                   |      |       |                        |      |                                |       |       |
| Total (restructured only) (467 cells)                     | 8,014                        | 3,078  | 11,092 | 0.30              | 0.23 | 0.28  | 0.30                   | 0.30 | 6,085                          | 2,013 | 8,099 |

| Sector  | Revenue Required (P2) |              |              | P2 Over-Under (days) |       |        | P2 Over-Under (Revenue) |              |              |
|---|-----------------------|--------------|--------------|----------------------|-------|--------|-------------------------|--------------|--------------|
|   | GOA                   | BSAI         | Total        | GOA                  | BSAI  | Total  | GOA                     | BSAI         | Total        |
| AFA CPs   | \$ -                  | \$ 1,195,356 | \$ 1,195,356 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| CPs in GOA Rockfish Pilot Program                         | \$ 28,182             | \$ -         | \$ 28,182    | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish CPs >= 60'                                      | \$ 368,758            | \$ 364,173   | \$ 732,931   | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish CPs 50' - 59.9'                                 | \$ 41,358             | \$ 7,320     | \$ 48,678    |                      |       |        |                         |              |              |
| Halibut IFQ CPs   | \$ 28,905             | \$ 27,889    | \$ 56,794    | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Trawl CPs >=60'                             | \$ 203,862            | \$ 1,725,324 | \$ 1,929,186 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Fixed Gear CPs >= 60'                       | \$ 226,497            | \$ 2,743,758 | \$ 2,970,255 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Fixed Gear CPs 50' - 59.9'                                | \$ 50,874             | \$ 10,614    | \$ 61,488    |                      |       |        |                         |              |              |
| Catcher Vessels in GOA Rockfish Pilot Program             | \$ 113,826            | \$ -         | \$ 113,826   | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish IFQ CVs >= 60'                                  | \$ 93,727             | \$ 66,688    | \$ 160,415   | 690                  | -44   | 647    | \$ 322,377              | \$ (20,325)  | \$ 302,052   |
| Sablefish CVs 50 - 59.9'                                  | \$ 143,042            | \$ 36,706    | \$ 179,748   | 297                  | -11   | 285    | \$ 138,512              | \$ (5,335)   | \$ 133,176   |
| Sablefish CVs 40 - 49.9'                                  | \$ 36,006             | \$ 11,348    | \$ 47,354    | 22                   | -13   | 8      | \$ 10,120               | \$ (6,209)   | \$ 3,911     |
| Sablefish IFQ CVs < 40'                                   | \$ -                  | \$ -         | \$ -         | 20                   | 0     | 20     | \$ 9,210                | \$ -         | \$ 9,210     |
| Halibut IFQ CVs >= 60'                                    | \$ 123,148            | \$ 21,295    | \$ 144,443   | 1,302                | 269   | 1,571  | \$ 607,959              | \$ 125,477   | \$ 733,436   |
| Halibut IFQ CVs 40 - 59.9'                                | \$ 822,807            | \$ 71,731    | \$ 894,539   | 77                   | 216   | 292    | \$ 35,806               | \$ 100,639   | \$ 136,445   |
| Halibut IFQ CVs <40'                                      | \$ -                  | \$ -         | \$ -         | 497                  | 46    | 542    | \$ 231,876              | \$ 21,440    | \$ 253,316   |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | \$ -                  | \$ 2,109,258 | \$ 2,109,258 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | \$ 106,470            | \$ 139,062   | \$ 245,532   | 38                   | 679   | 716    | \$ 17,569               | \$ 316,885   | \$ 334,453   |
| Catcher Vessels >= 60' trawl non-AFA                      | \$ 193,618            | \$ 169,101   | \$ 362,719   | 700                  | 43    | 744    | \$ 327,115              | \$ 20,183    | \$ 347,298   |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | \$ 103,534            | \$ 2,102     | \$ 105,635   | 40                   | 11    | 51     | \$ 18,623               | \$ 4,986     | \$ 23,609    |
| Catcher Vessels >= 60' Fixed gear                         | \$ 111,311            | \$ 166,557   | \$ 277,868   | 142                  | 271   | 414    | \$ 66,468               | \$ 126,679   | \$ 193,148   |
| Catcher Vessels 50' - 59.9' Fixed gear                    | \$ 264,886            | \$ 65,029    | \$ 329,915   | -214                 | -19   | -232   | \$ (99,869)             | \$ (8,644)   | \$ (108,513) |
| Catcher Vessels 40' - 49.9' Fixed gear                    | \$ 114,165            | \$ 25,312    | \$ 139,477   | -152                 | -30   | -182   | \$ (70,785)             | \$ (14,197)  | \$ (84,982)  |
| Catcher Vessels < 40' Fixed gear                          | \$ -                  | \$ -         | \$ -         | 32                   | 2     | 34     | \$ 14,750               | \$ 999       | \$ 15,748    |
| Total CVs (excludes IFQ - halibut and sablefish)          | \$ 893,984            | \$ 2,676,420 | \$ 3,570,404 | 586                  | 957   | 1,543  | \$ 273,871              | \$ 446,890   | \$ 720,761   |
| Motherships AFA and Non-AFA                               | \$ -                  | \$ -         | \$ -         | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Shore-based/Floating processors (AFA)                     | \$ -                  | \$ -         | \$ -         | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Shore-based/Floating processors (non-AFA)                 | \$ 729,080            | \$ 165,318   | \$ 894,398   | -1,561               | -354  | -1,915 | \$ (729,080)            | \$ (165,318) | \$ (894,398) |
| Total   |                       |              |              |                      |       |        |                         |              |              |
| Total (restructured only) (467 cells)                     | \$ 2,841,794          | \$ 940,248   | \$ 3,782,043 | 1,929                | 1,065 | 2,993  | \$ 900,650              | \$ 497,258   | \$ 1,397,908 |

Alternative 3 (2% fee), with Option 1 applied to all halibut and sablefish catcher vessels <60' LOA (1% fee)

NOTE: Assumes no observer deployment in <40' sectors

| Sector   | Fee Structure |      | Sea-days realized |        |        | Number of Participants |      |       | Cost 2008    |              |               |
|--|---------------|------|-------------------|--------|--------|------------------------|------|-------|--------------|--------------|---------------|
|  | GOA           | BSAI | GOA               | BSAI   | Total  | GOA                    | BSAI | Total | GOA          | BSAI         | Total         |
| AFA CPs  | 366           | 366  | 0                 | 3,266  | 3,266  | 0                      | 17   | 17    | \$ -         | \$ 1,195,356 | \$ 1,195,356  |
| CPs in GOA Rockfish Pilot Program                                    | 366           | 366  | 77                | 0      | 77     | 7                      | 0    | 7     | \$ 28,182    | \$ -         | \$ 28,182     |
| Sablefish CPs >= 60'   | 366           | 366  | 1,008             | 995    | 2,003  | 10                     | 15   | 18    | \$ 368,758   | \$ 364,173   | \$ 732,931    |
| CPs Sablefish CPs 50' - 59.9'  | 366           | 366  | 113               | 20     | 133    | 1                      | 1    | 2     |              |              |               |
| Halibut IFQ CPs  | 366           | 366  | 79                | 76     | 155    | 6                      | 3    | 7     | \$ 28,905    | \$ 27,889    | \$ 56,794     |
| Non-Specified Trawl CPs >=60'  | 366           | 366  | 557               | 4,714  | 5,271  | 14                     | 22   | 24    | \$ 203,862   | \$ 1,725,324 | \$ 1,929,186  |
| Non-Specified Fixed Gear CPs >= 60'                                  | 366           | 366  | 619               | 7,497  | 8,115  | 17                     | 42   | 43    | \$ 226,497   | \$ 2,743,758 | \$ 2,970,255  |
| Fixed Gear CPs 50' - 59.9'   | 366           | 366  | 139               | 29     | 168    | 2                      | 1    | 2     |              |              |               |
| Catcher Vessels in GOA Rockfish Pilot Program                        | 366           | 366  | 311               | 0      | 311    | 26                     | 0    | 26    | \$ 113,826   | \$ -         | \$ 113,826    |
| MGT CVs Sablefish IFQ CVs >= 60'                                     | 467           | 467  | 669               | 476    | 1,145  | 42                     | 13   | 51    | \$ 416,104   | \$ 46,362    | \$ 462,466    |
| Sablefish CVs 50 - 59.9'   | 467           | 467  | 1,021             | 262    | 1,283  | 97                     | 11   | 104   | \$ 281,554   | \$ 31,371    | \$ 312,925    |
| Sablefish CVs 40 - 49.9'   | 467           | 467  | 257               | 81     | 338    | 51                     | 3    | 52    | \$ 46,126    | \$ 5,139     | \$ 51,265     |
| Sablefish IFQ CVs < 40'  | 467           | 467  | 99                | 0      | 99     | 16                     | 0    | 16    | \$ 9,210     | \$ -         | \$ 9,210      |
| Halibut IFQ CVs >= 60'   | 467           | 467  | 879               | 152    | 1,031  | 77                     | 27   | 83    | \$ 731,107   | \$ 146,772   | \$ 877,879    |
| Halibut IFQ CVs 40 - 59.9'   | 467           | 467  | 5,873             | 512    | 6,384  | 537                    | 45   | 560   | \$ 858,614   | \$ 172,370   | \$ 1,030,983  |
| Halibut IFQ CVs <40'   | 467           | 467  | 5,957             | 6,330  | 12,287 | 463                    | 257  | 708   | \$ 231,876   | \$ 21,440    | \$ 253,316    |
| Unspecified CV Catcher Vessels >= 60' trawl AFA (BS Pollock Targets) | 467           | 366  | 0                 | 5,763  | 5,763  | 0                      | 82   | 82    | \$ -         | \$ 2,109,258 | \$ 2,109,258  |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets)            | 467           | 467  | 760               | 993    | 1,753  | 20                     | 84   | 84    | \$ 124,039   | \$ 455,946   | \$ 579,985    |
| Catcher Vessels >= 60' trawl non-AFA                                 | 467           | 467  | 1,382             | 1,207  | 2,589  | 25                     | 21   | 40    | \$ 520,733   | \$ 189,284   | \$ 710,017    |
| Catcher Vessels 50' - 59.9' trawl non-AFA                            | 467           | 467  | 739               | 15     | 754    | 27                     | 3    | 27    | \$ 244,314   | \$ 14,175    | \$ 258,488    |
| Catcher Vessels >= 60' Fixed gear                                    | 467           | 467  | 795               | 1,189  | 1,983  | 104                    | 74   | 138   | \$ 177,779   | \$ 293,236   | \$ 471,015    |
| Catcher Vessels 50' - 59.9' Fixed gear                               | 467           | 467  | 1,891             | 464    | 2,355  | 293                    | 43   | 300   | \$ 330,034   | \$ 112,770   | \$ 442,804    |
| Catcher Vessels 40' - 49.9' Fixed gear                               | 467           | 467  | 815               | 181    | 996    | 339                    | 20   | 347   | \$ 86,760    | \$ 22,230    | \$ 108,990    |
| Catcher Vessels < 40' Fixed gear                                     | 467           | 467  | 415               | 148    | 563    | 491                    | 268  | 744   | \$ 29,499    | \$ 1,997     | \$ 31,497     |
| Total CVs (excludes IFQ - halibut and sablefish)                     |               |      | 6,796             | 9,959  | 16,755 |                        |      |       | \$ 1,513,158 | \$ 3,198,896 | \$ 4,712,054  |
| Processors Motherships AFA and Non-AFA                               | 366           | 366  | 73                | 465    | 538    |                        |      | 11    | \$ 26,718    | \$ 170,190   | \$ 196,908    |
| Shore-based/Floating processors (AFA)                                | 467           | 366  | 0                 | 779    | 779    |                        |      | 7     | \$ -         | \$ 285,114   | \$ 285,114    |
| Shore-based/Floating processors (non-AFA)                            | 467           | 467  | 5,204             | 1,180  | 6,384  |                        |      | 24    | \$ -         | \$ -         | \$ -          |
| Total  |               |      | 29,730            | 36,793 | 66,523 |                        |      |       | \$ 5,176,727 | \$ 9,866,975 | \$ 16,986,515 |
| Total (restructured only) (467 cells)                                |               |      | 26,755            | 13,189 | 39,944 |                        |      |       | \$ 4,087,747 | \$ 1,513,093 | \$ 5,600,840  |

| Sector   | Observer Days Purchased (P1)                              |        |        | Rate Purchased P1 |      |       | Observer Rate Required |      | P2 Observer Days Required (P2) |       |       |       |
|--|---|--------|--------|-------------------|------|-------|------------------------|------|--------------------------------|-------|-------|-------|
|  | GOA   | BSAI   | Total  | GOA               | BSAI | Total | GOA                    | BSAI | GOA                            | BSAI  | Total |       |
| CPs  | AFA CPs   | 0      | 3,266  | 3,266             | 0.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 0     | 3,266 | 3,266 |
|  | CPs in GOA Rockfish Pilot Program                         | 77     | 0      | 77                | 1.00 | 0.00  | 1.00                   | 1.00 | 1.00                           | 77    | 0     | 77    |
|  | Sablefish CPs >= 60'                                      | 1,008  | 995    | 2,003             | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 1,008 | 995   | 2,003 |
|  | Sablefish CPs 50' - 59.9'                                 |        |        |                   | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 113   | 20    | 133   |
|  | Halibut IFQ CPs   | 79     | 76     | 155               | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 79    | 76    | 155   |
|  | Non-Specified Trawl CPs >=60'                             | 557    | 4,714  | 5,271             | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 557   | 4,714 | 5,271 |
|  | Non-Specified Fixed Gear CPs >= 60'                       | 619    | 7,497  | 8,115             | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 619   | 7,497 | 8,115 |
|  | Fixed Gear CPs 50' - 59.9'                                |        |        |                   | 1.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 139   | 29    | 168   |
| MGT CVs  | Catcher Vessels in GOA Rockfish Pilot Program             | 311    | 0      | 311               | 1.00 | 0.00  | 1.00                   | 1.00 | 1.00                           | 311   | 0     | 311   |
|  | Sablefish IFQ CVs >= 60'                                  | 891    | 99     | 990               | 1.33 | 0.21  | 0.86                   | 0.30 | 0.30                           | 201   | 143   | 344   |
|  | Sablefish CVs 50 - 59.9'                                  | 603    | 67     | 670               | 0.59 | 0.26  | 0.52                   | 0.30 | 0.30                           | 306   | 79    | 385   |
|  | Sablefish CVs 40 - 49.9'                                  | 99     | 11     | 110               | 0.38 | 0.14  | 0.32                   | 0.30 | 0.30                           | 77    | 24    | 101   |
|  | Sablefish IFQ CVs < 40'                                   | 20     | 0      | 20                | 0.20 | 0     | 0.20                   | 0.30 | 0.30                           | 0     | 0     | 0     |
|  | Halibut IFQ CVs >= 60'                                    | 1,566  | 314    | 1,880             | 1.78 | 2.07  | 1.82                   | 0.30 | 0.30                           | 264   | 46    | 309   |
|  | Halibut IFQ CVs 40 - 59.9'                                | 1,839  | 369    | 2,208             | 0.31 | 0.72  | 0.35                   | 0.30 | 0.30                           | 1,762 | 154   | 1,916 |
|  | Halibut IFQ CVs <40'                                      | 497    | 46     | 542               | 0.08 | 0.01  | 0.04                   | 0.30 | 0.30                           | 0     | 0     | 0     |
| Unspecified CV                                   | Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 0      | 5,763  | 5,763             | 0.00 | 1.00  | 1.00                   | 1.00 | 1.00                           | 0     | 0     | 0     |
|  | Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 266    | 976    | 1,242             | 0.35 | 0.98  | 0.71                   | 0.30 | 0.30                           | 228   | 298   | 526   |
|  | Catcher Vessels >= 60' trawl non-AFA                      | 1,115  | 405    | 1,520             | 0.81 | 0.34  | 0.59                   | 0.30 | 0.30                           | 415   | 362   | 777   |
|  | Catcher Vessels 50' - 59.9' trawl non-AFA                 | 523    | 30     | 554               | 0.71 | 2.02  | 0.73                   | 0.30 | 0.30                           | 222   | 5     | 226   |
|  | Catcher Vessels >= 60' Fixed gear                         | 381    | 628    | 1,009             | 0.48 | 0.53  | 0.51                   | 0.30 | 0.30                           | 238   | 357   | 595   |
|  | Catcher Vessels 50' - 59.9' Fixed gear                    | 707    | 241    | 948               | 0.37 | 0.52  | 0.40                   | 0.30 | 0.30                           | 567   | 139   | 706   |
|  | Catcher Vessels 40' - 49.9' Fixed gear                    | 186    | 48     | 233               | 0.23 | 0.26  | 0.23                   | 0.30 | 0.30                           | 244   | 54    | 299   |
|  | Catcher Vessels < 40' Fixed gear                          | 63     | 4      | 67                | 0.15 | 0.03  | 0.12                   | 0.30 | 0.30                           | 0     | 0     | 0     |
| Total CVs (excludes IFQ - halibut and sablefish) |   | 3,240  | 8,096  | 11,336            | 0.48 | 0.81  | 0.68                   |      |                                | 1,914 | 1,214 | 3,129 |
| Processors                                       | Motherships AFA and Non-AFA                               | 73     | 465    | 538               | 1.00 | 1.00  | 1.00                   | 0.00 | 0.00                           | 0     | 0     | 0     |
|  | Shore-based/Floating processors (AFA)                     | 0      | 779    | 779               | NA   | 1.00  | 1.00                   | 1.00 | 0.00                           | 0     | 0     | 0     |
|  | Shore-based/Floating processors (non-AFA)                 | 0      | 0      | 0                 | NA   | NA    | 0.00                   | 0.30 | 0.30                           | 1,561 | 354   | 1,915 |
| Total  |   | 11,729 | 26,844 | 38,572            |      |       |                        |      |                                |       |       |       |
| Total (restructured only) (467 cells)            |   | 8,753  | 3,240  | 11,993            | 0.33 | 0.25  | 0.30                   | 0.30 | 0.30                           | 6,085 | 2,013 | 8,099 |



| Sector  | Revenue Required (P2) |              |              | P2 Over-Under (days) |       |        | P2 Over-Under (Revenue) |              |              |
|---|-----------------------|--------------|--------------|----------------------|-------|--------|-------------------------|--------------|--------------|
|   | GOA                   | BSAI         | Total        | GOA                  | BSAI  | Total  | GOA                     | BSAI         | Total        |
| AFA CPs   | \$ -                  | \$ 1,195,356 | \$ 1,195,356 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| CPs in GOA Rockfish Pilot Program                         | \$ 28,182             | \$ -         | \$ 28,182    | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish CPs >= 60'                                      | \$ 368,758            | \$ 364,173   | \$ 732,931   | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish CPs 50' - 59.9'                                 | \$ 41,358             | \$ 7,320     | \$ 48,678    |                      |       |        |                         |              |              |
| Halibut IFQ CPs   | \$ 28,905             | \$ 27,889    | \$ 56,794    | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Trawl CPs >=60'                             | \$ 203,862            | \$ 1,725,324 | \$ 1,929,186 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Fixed Gear CPs >= 60'                       | \$ 226,497            | \$ 2,743,758 | \$ 2,970,255 | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Fixed Gear CPs 50' - 59.9'                                | \$ 50,874             | \$ 10,614    | \$ 61,488    |                      |       |        |                         |              |              |
| Catcher Vessels in GOA Rockfish Pilot Program             | \$ 113,826            | \$ -         | \$ 113,826   | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish IFQ CVs >= 60'                                  | \$ 93,727             | \$ 66,688    | \$ 160,415   | 690                  | -44   | 647    | \$ 322,377              | \$ (20,325)  | \$ 302,052   |
| Sablefish CVs 50 - 59.9'                                  | \$ 143,042            | \$ 36,706    | \$ 179,748   | 297                  | -11   | 285    | \$ 138,512              | \$ (5,335)   | \$ 133,176   |
| Sablefish CVs 40 - 49.9'                                  | \$ 36,006             | \$ 11,348    | \$ 47,354    | 22                   | -13   | 8      | \$ 10,120               | \$ (6,209)   | \$ 3,911     |
| Sablefish IFQ CVs < 40'                                   | \$ -                  | \$ -         | \$ -         | 20                   | 0     | 20     | \$ 9,210                | \$ -         | \$ 9,210     |
| Halibut IFQ CVs >= 60'                                    | \$ 123,148            | \$ 21,295    | \$ 144,443   | 1,302                | 269   | 1,571  | \$ 607,959              | \$ 125,477   | \$ 733,436   |
| Halibut IFQ CVs 40 - 59.9'                                | \$ 822,807            | \$ 71,731    | \$ 894,539   | 77                   | 216   | 292    | \$ 35,806               | \$ 100,639   | \$ 136,445   |
| Halibut IFQ CVs <40'                                      | \$ -                  | \$ -         | \$ -         | 497                  | 46    | 542    | \$ 231,876              | \$ 21,440    | \$ 253,316   |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | \$ -                  | \$ -         | \$ -         | 0                    | 0     | 0      | \$ -                    | \$ 2,109,258 | \$ 2,109,258 |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | \$ 106,470            | \$ 139,062   | \$ 245,532   | 38                   | 679   | 716    | \$ 17,569               | \$ 316,885   | \$ 334,453   |
| Catcher Vessels >= 60' trawl non-AFA                      | \$ 193,618            | \$ 169,101   | \$ 362,719   | 700                  | 43    | 744    | \$ 327,115              | \$ 20,183    | \$ 347,298   |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | \$ 103,534            | \$ 2,102     | \$ 105,635   | 301                  | 26    | 327    | \$ 140,780              | \$ 12,073    | \$ 152,853   |
| Catcher Vessels >= 60' Fixed gear                         | \$ 111,311            | \$ 166,557   | \$ 277,868   | 142                  | 271   | 414    | \$ 66,468               | \$ 126,679   | \$ 193,148   |
| Catcher Vessels 50' - 59.9' Fixed gear                    | \$ 264,886            | \$ 65,029    | \$ 329,915   | 140                  | 102   | 242    | \$ 65,148               | \$ 47,741    | \$ 112,889   |
| Catcher Vessels 40' - 49.9' Fixed gear                    | \$ 114,165            | \$ 25,312    | \$ 139,477   | -59                  | -7    | -65    | \$ (27,405)             | \$ (3,082)   | \$ (30,487)  |
| Catcher Vessels < 40' Fixed gear                          | \$ -                  | \$ -         | \$ -         | 63                   | 4     | 67     | \$ 29,499               | \$ 1,997     | \$ 31,497    |
| Total CVs (excludes IFQ - halibut and sablefish)          | \$ 893,984            | \$ 567,162   | \$ 1,461,146 | 1,326                | 1,119 | 2,445  | \$ 619,174              | \$ 2,631,734 | \$ 3,250,908 |
| Motherships AFA and Non-AFA                               | \$ -                  | \$ -         | \$ -         | 0                    | 0     | 0      | \$ 26,718               | \$ 170,190   | \$ 196,908   |
| Shore-based/Floating processors (AFA)                     | \$ -                  | \$ -         | \$ -         | 0                    | 0     | 0      | \$ -                    | \$ 285,114   | \$ 285,114   |
| Shore-based/Floating processors (non-AFA)                 | \$ 729,080            | \$ 165,318   | \$ 894,398   | -1,561               | -354  | -1,915 | \$ (729,080)            | \$ (165,318) | \$ (894,398) |
| Total   |                       |              |              |                      |       |        |                         |              |              |
| Total (restructured only) (467 cells)                     | \$ 2,841,794          | \$ 940,248   | \$ 3,782,043 | 2,668                | 1,227 | 3,895  | \$ 1,245,953            | \$ 572,844   | \$ 1,818,798 |

DRAFT – Results of AP motion on observer restructuring

Alternative 3 (2% fee), with Option 1 applied to halibut and sablefish landings (1% fee) in third year of program<sup>1</sup>

NOTE: Assumes no observer deployment in <40' sectors, and fee revenues generated from these sectors are applied to the total funding available for P2 deployment in all other restructured sectors

| Sector  | Fee Structure |      | Sea-days realized |        |        | Number of Participants |      |       | Cost 2008    |               |               |
|---|---------------|------|-------------------|--------|--------|------------------------|------|-------|--------------|---------------|---------------|
|   | GOA           | BSAI | GOA               | BSAI   | Total  | GOA                    | BSAI | Total | GOA          | BSAI          | Total         |
| AFA CPs   | 366           | 366  | 0                 | 3,266  | 3,266  | 0                      | 17   | 17    | \$ -         | \$ 1,195,356  | \$ 1,195,356  |
| CPs in GOA Rockfish Pilot Program                         | 366           | 366  | 77                | 0      | 77     | 7                      | 0    | 7     | \$ 28,182    | \$ -          | \$ 28,182     |
| Sablefish CPs >= 60'                                      | 366           | 366  | 1,008             | 995    | 2,003  | 10                     | 15   | 18    | \$ 368,758   | \$ 364,173    | \$ 732,931    |
| Sablefish CPs 50' - 59.9'                                 | 366           | 366  | 113               | 20     | 133    | 1                      | 1    | 2     |              |               |               |
| Halibut IFQ CPs   | 366           | 366  | 79                | 76     | 155    | 6                      | 3    | 7     | \$ 28,905    | \$ 27,889     | \$ 56,794     |
| Non-Specified Trawl CPs >=60'                             | 366           | 366  | 557               | 4,714  | 5,271  | 14                     | 22   | 24    | \$ 203,862   | \$ 1,725,324  | \$ 1,929,186  |
| Non-Specified Fixed Gear CPs >= 60'                       | 366           | 366  | 619               | 7,497  | 8,115  | 17                     | 42   | 43    | \$ 226,497   | \$ 2,743,758  | \$ 2,970,255  |
| Fixed Gear CPs 50' - 59.9'                                | 366           | 366  | 139               | 29     | 168    | 2                      | 1    | 2     |              |               |               |
| Catcher Vessels in GOA Rockfish Pilot Program             | 366           | 366  | 311               | 0      | 311    | 26                     | 0    | 26    | \$ 113,826   | \$ -          | \$ 113,826    |
| Sablefish IFQ CVs >= 60'                                  | 467           | 467  | 669               | 476    | 1,145  | 42                     | 13   | 51    | \$ 208,052   | \$ 23,181     | \$ 231,233    |
| Sablefish CVs 50 - 59.9'                                  | 467           | 467  | 1,021             | 262    | 1,283  | 97                     | 11   | 104   | \$ 281,554   | \$ 31,371     | \$ 312,925    |
| Sablefish CVs 40 - 49.9'                                  | 467           | 467  | 257               | 81     | 338    | 51                     | 3    | 52    | \$ 46,126    | \$ 5,139      | \$ 51,265     |
| Sablefish IFQ CVs < 40'                                   | 467           | 467  | 99                | 0      | 99     | 16                     | 0    | 16    | \$ 9,210     | \$ -          | \$ 9,210      |
| Halibut IFQ CVs >=40'                                     | 467           | 467  | 6,743             | 656    | 7,399  | 614                    | 72   | 643   | \$ 1,224,167 | \$ 245,756    | \$ 1,469,923  |
| Halibut IFQ CVs <40'                                      | 467           | 467  | 5,957             | 6,330  | 12,287 | 463                    | 257  | 708   | \$ 231,876   | \$ 21,440     | \$ 253,316    |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 467           | 366  | 0                 | 5,763  | 5,763  | 0                      | 82   | 82    | \$ -         | \$ 2,109,258  | \$ 2,109,258  |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 467           | 467  | 760               | 993    | 1,753  | 20                     | 84   | 84    | \$ 124,039   | \$ 455,946    | \$ 579,985    |
| Catcher Vessels >= 60' trawl non-AFA                      | 467           | 467  | 1,382             | 1,207  | 2,589  | 25                     | 21   | 40    | \$ 520,733   | \$ 189,284    | \$ 710,017    |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 467           | 467  | 739               | 15     | 754    | 27                     | 3    | 27    | \$ 244,314   | \$ 14,175     | \$ 258,488    |
| Catcher Vessels >= 60' Fixed gear                         | 467           | 467  | 795               | 1,189  | 1,983  | 104                    | 74   | 138   | \$ 177,779   | \$ 293,236    | \$ 471,015    |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 467           | 467  | 1,891             | 464    | 2,355  | 293                    | 43   | 300   | \$ 330,034   | \$ 112,770    | \$ 442,804    |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 467           | 467  | 815               | 181    | 996    | 339                    | 20   | 347   | \$ 86,760    | \$ 22,230     | \$ 108,990    |
| Catcher Vessels < 40' Fixed gear                          | 467           | 467  | 415               | 148    | 563    | 491                    | 268  | 744   | \$ 29,499    | \$ 1,997      | \$ 31,497     |
| Total CVs (excludes IFQ - halibut and sablefish)          |               |      | 6,796             | 9,959  | 16,755 |                        |      |       | \$ 1,513,158 | \$ 3,198,896  | \$ 4,712,054  |
| Processors  |               |      |                   |        |        |                        |      |       |              |               |               |
| Motherships AFA and Non-AFA                               | 366           | 366  | 73                | 465    | 538    |                        |      | 11    | \$ 26,718    | \$ 170,190    | \$ 196,908    |
| Shore-based/Floating processors (AFA)                     | 467           | 366  | 0                 | 779    | 779    |                        |      | 7     | \$ -         | \$ 285,114    | \$ 285,114    |
| Shore-based/Floating processors (non-AFA)                 | 467           | 467  | 5,204             | 1,180  | 6,384  |                        |      | 24    | \$ -         | \$ -          | \$ -          |
| Total   |               |      | 29,721            | 36,785 | 66,506 |                        |      |       | \$ 4,603,122 | \$ 10,055,521 | \$ 14,658,644 |
| Total (restructured only) (467 cells)                     |               |      | 26,746            | 13,181 | 39,927 |                        |      |       | \$ 3,514,142 | \$ 1,416,525  | \$ 4,930,668  |

<sup>1</sup> All restructured sectors, including halibut and sablefish, would pay a 2% fee in the first two years of the program. See Appendix 11, Table 11-6 Alternative 3 for those results (pp. A-72 through A-74).

DRAFT – Results of AP motion on observer restructuring

| Sector  | Observer Days Purchased (P1) |               |               | Rate Purchased P1 |             |             | Observer Rate Required |      | P2 Observer Days Required (P2) |              |              | Revenue Required (P2) |                   |                     |
|---|------------------------------|---------------|---------------|-------------------|-------------|-------------|------------------------|------|--------------------------------|--------------|--------------|-----------------------|-------------------|---------------------|
|   | GOA                          | BSAI          | Total         | GOA               | BSAI        | Total       | GOA                    | BSAI | GOA                            | BSAI         | Total        | GOA                   | BSAI              | Total               |
| AFA CPs   | 0                            | 3,266         | 3,266         | 0.00              | 1.00        | 1.00        | 1.00                   | 1.00 | 0                              | 3,266        | 3,266        | \$ -                  | \$ 1,195,356      | \$ 1,195,356        |
| CPs in GOA Rockfish Pilot Program                         | 77                           | 0             | 77            | 1.00              | 0.00        | 1.00        | 1.00                   | 1.00 | 77                             | 0            | 77           | \$ 28,182             | \$ -              | \$ 28,182           |
| Sablefish CPs >= 60'                                      | 1,008                        | 995           | 2,003         | 1.00              | 1.00        | 1.00        | 1.00                   | 1.00 | 1,008                          | 995          | 2,003        | \$ 368,758            | \$ 364,173        | \$ 732,931          |
| Sablefish CPs 50' - 59.9'                                 |                              |               |               |                   |             |             | 1.00                   | 1.00 | 113                            | 20           | 133          | \$ 41,358             | \$ 7,320          | \$ 48,678           |
| Halibut IFQ CPs   | 79                           | 76            | 155           | 1.00              | 1.00        | 1.00        | 1.00                   | 1.00 | 79                             | 76           | 155          | \$ 28,905             | \$ 27,889         | \$ 56,794           |
| Non-Specified Trawl CPs >=60'                             | 557                          | 4,714         | 5,271         | 1.00              | 1.00        | 1.00        | 1.00                   | 1.00 | 557                            | 4,714        | 5,271        | \$ 203,862            | \$ 1,725,324      | \$ 1,929,186        |
| Non-Specified Fixed Gear CPs >= 60'                       | 619                          | 7,497         | 8,115         | 1.00              | 1.00        | 1.00        | 1.00                   | 1.00 | 619                            | 7,497        | 8,115        | \$ 226,497            | \$ 2,743,758      | \$ 2,970,255        |
| Fixed Gear CPs 50' - 59.9'                                |                              |               |               |                   |             |             | 1.00                   | 1.00 | 139                            | 29           | 168          | \$ 50,874             | \$ 10,614         | \$ 61,488           |
| Catcher Vessels in GOA Rockfish Pilot Program             | 311                          | 0             | 311           | 1.00              | 0.00        | 1.00        | 1.00                   | 1.00 | 311                            | 0            | 311          | \$ 113,826            | \$ -              | \$ 113,826          |
| Sablefish IFQ CVs >= 60'                                  | 446                          | 50            | 495           | 0.67              | 0.10        | 0.43        | 0.30                   | 0.30 | 201                            | 143          | 344          | \$ 93,727             | \$ 66,688         | \$ 160,415          |
| Sablefish CVs 50 - 59.9'                                  | 603                          | 67            | 670           | 0.59              | 0.26        | 0.52        | 0.30                   | 0.30 | 306                            | 79           | 385          | \$ 143,042            | \$ 36,706         | \$ 179,748          |
| Sablefish CVs 40 - 49.9'                                  | 99                           | 11            | 110           | 0.38              | 0.14        | 0.32        | 0.30                   | 0.30 | 77                             | 24           | 101          | \$ 36,006             | \$ 11,348         | \$ 47,354           |
| Sablefish IFQ CVs < 40'                                   | 20                           | 0             | 20            | 0.20              | 0.00        | 0.20        | 0.30                   | 0.30 |                                |              |              | \$ -                  | \$ -              | \$ -                |
| Halibut IFQ CVs >=40'                                     | 2,621                        | 526           | 3,148         | 0.39              | 0.80        | 0.43        | 0.30                   | 0.30 | 2,023                          | 197          | 2,220        | \$ 944,694            | \$ 91,906         | \$ 1,036,600        |
| Halibut IFQ CVs <40'                                      | 497                          | 46            | 542           | 0.08              | 0.01        | 0.04        | 0.30                   | 0.30 |                                |              |              | \$ -                  | \$ -              | \$ -                |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 0                            | 5,763         | 5,763         | 0.00              | 1.00        | 1.00        | 1.00                   | 0.00 | 0                              | 0            | 0            | \$ -                  | \$ -              | \$ -                |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 266                          | 976           | 1,242         | 0.35              | 0.98        | 0.71        | 0.30                   | 0.30 | 228                            | 298          | 526          | \$ 106,470            | \$ 139,062        | \$ 245,532          |
| Catcher Vessels >= 60' trawl non-AFA                      | 1,115                        | 405           | 1,520         | 0.81              | 0.34        | 0.59        | 0.30                   | 0.30 | 415                            | 362          | 777          | \$ 193,618            | \$ 169,101        | \$ 362,719          |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 523                          | 30            | 554           | 0.71              | 2.02        | 0.73        | 0.30                   | 0.30 | 222                            | 5            | 226          | \$ 103,534            | \$ 2,102          | \$ 105,635          |
| Catcher Vessels >= 60' Fixed gear                         | 381                          | 628           | 1,009         | 0.48              | 0.53        | 0.51        | 0.30                   | 0.30 | 238                            | 357          | 595          | \$ 111,311            | \$ 166,557        | \$ 277,868          |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 707                          | 241           | 948           | 0.37              | 0.52        | 0.40        | 0.30                   | 0.30 | 567                            | 139          | 706          | \$ 264,886            | \$ 65,029         | \$ 329,915          |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 186                          | 48            | 233           | 0.23              | 0.26        | 0.23        | 0.30                   | 0.30 | 244                            | 54           | 299          | \$ 114,165            | \$ 25,312         | \$ 139,477          |
| Catcher Vessels < 40' Fixed gear                          | 63                           | 4             | 67            | 0.15              | 0.03        | 0.12        | 0.30                   | 0.30 |                                |              |              | \$ -                  | \$ -              | \$ -                |
| <b>Total CVs (excludes IFQ - halibut and sablefish)</b>   | <b>3,240</b>                 | <b>8,096</b>  | <b>11,336</b> | <b>0.48</b>       | <b>0.81</b> | <b>0.68</b> |                        |      | <b>1,914</b>                   | <b>1,214</b> | <b>3,129</b> | <b>\$ 893,984</b>     | <b>\$ 567,162</b> | <b>\$ 1,461,146</b> |
| Processors  |                              |               |               |                   |             |             |                        |      |                                |              |              |                       |                   |                     |
| Motherships AFA and Non-AFA                               | 73                           | 465           | 538           | 1.00              | 1.00        | 1.00        | 0.00                   | 0.00 | 0                              | 0            | 0            | \$ -                  | \$ -              | \$ -                |
| Shore-based/Floating processors (AFA)                     | 0                            | 779           | 779           | NA                | 1.00        | 1.00        | 1.00                   | 0.00 | 0                              | 0            | 0            | \$ -                  | \$ -              | \$ -                |
| Shore-based/Floating processors (non-AFA)                 | 0                            | 0             | 0             | NA                | NA          | 0.00        | 0.30                   | 0.30 | 1,561                          | 354          | 1,915        | \$ 729,080            | \$ 165,318        | \$ 894,398          |
| <b>Total</b>  | <b>10,500</b>                | <b>26,637</b> | <b>37,137</b> |                   |             |             |                        |      |                                |              |              |                       |                   |                     |
| <b>Total (restructured only) (467 cells)</b>              | <b>7,525</b>                 | <b>3,033</b>  | <b>10,558</b> | <b>0.28</b>       | <b>0.23</b> | <b>0.26</b> |                        |      | <b>6,083</b>                   | <b>2,011</b> | <b>8,093</b> | <b>\$ 2,840,534</b>   | <b>\$ 939,127</b> | <b>\$ 3,779,661</b> |

DRAFT – Results of AP motion on observer restructuring

| Sector   | P2 Over-Under (days) |       |        | P2 Over-Under (Revenue) |              |              |
|--|----------------------|-------|--------|-------------------------|--------------|--------------|
|  | GOA                  | BSAI  | Total  | GOA                     | BSAI         | Total        |
| AFA CPs  | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| CPs in GOA Rockfish Pilot Program                                    | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Sablefish CPs >= 60'   | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| CPs Sablefish CPs 50' - 59.9'  |                      |       |        |                         |              |              |
| Halibut IFQ CPs  | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Trawl CPs >=60'  | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Non-Specified Fixed Gear CPs >= 60'                                  | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Fixed Gear CPs 50' - 59.9'   |                      |       |        |                         |              |              |
| Catcher Vessels in GOA Rockfish Pilot Program                        | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| MGT CVs Sablefish IFQ CVs >= 60'                                     | 245                  | -93   | 152    | \$ 114,325              | \$ (43,506)  | \$ 70,819    |
| Sablefish CVs 50 - 59.9'   | 297                  | -11   | 285    | \$ 138,512              | \$ (5,335)   | \$ 133,176   |
| Sablefish CVs 40 - 49.9'   | 22                   | -13   | 8      | \$ 10,120               | \$ (6,209)   | \$ 3,911     |
| Sablefish IFQ CVs < 40'  | 20                   | 0     | 20     | \$ 9,210                | \$ -         | \$ 9,210     |
| Halibut IFQ CVs >=40'  | 598                  | 329   | 928    | \$ 279,473              | \$ 153,850   | \$ 433,323   |
| Halibut IFQ CVs <40'   | 497                  | 46    | 542    | \$ 231,876              | \$ 21,440    | \$ 253,316   |
| Unspecified CV Catcher Vessels >= 60' trawl AFA (BS Pollock Targets) | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets)            | 38                   | 679   | 716    | \$ 17,569               | \$ 316,885   | \$ 334,453   |
| Catcher Vessels >= 60' trawl non-AFA                                 | 700                  | 43    | 744    | \$ 327,115              | \$ 20,183    | \$ 347,298   |
| Catcher Vessels 50' - 59.9' trawl non-AFA                            | 301                  | 26    | 327    | \$ 140,780              | \$ 12,073    | \$ 152,853   |
| Catcher Vessels >= 60' Fixed gear                                    | 142                  | 271   | 414    | \$ 66,468               | \$ 126,679   | \$ 193,148   |
| Catcher Vessels 50' - 59.9' Fixed gear                               | 140                  | 102   | 242    | \$ 65,148               | \$ 47,741    | \$ 112,889   |
| Catcher Vessels 40' - 49.9' Fixed gear                               | -59                  | -7    | -65    | \$ (27,405)             | \$ (3,082)   | \$ (30,487)  |
| Catcher Vessels < 40' Fixed gear                                     | 63                   | 4     | 67     | \$ 29,499               | \$ 1,997     | \$ 31,497    |
| Total CVs (excludes IFQ - halibut and sablefish)                     | 1,326                | 1,119 | 2,445  | \$ 619,174              | \$ 522,476   | \$ 1,141,650 |
| Processors Motherships AFA and Non-AFA                               | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Shore-based/F loading processors (AFA)                               | 0                    | 0     | 0      | \$ -                    | \$ -         | \$ -         |
| Shore-based/F loading processors (non-AFA)                           | -1,561               | -354  | -1,915 | \$ (729,080)            | \$ (165,318) | \$ (894,398) |
| Total  |                      |       |        |                         |              |              |
| Total (restructured only) (467 cells)                                | 1,442                | 1,022 | 2,465  | \$ 673,609              | \$ 477,398   | \$ 1,151,007 |



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Alternative 3 (2% fee), with Option 1 applied to halibut and sablefish landings (1% fee) in third year of program<sup>2</sup>

NOTE: Assumes observer deployment in <40' sectors, and fee revenues generated from these sectors are applied to the total funding available for P2 deployment.

| Sector  | Fee Structure |      | Sea-days realized |               |               | Number of Participants |      |       | Cost 2008           |                      |                      |
|---|---------------|------|-------------------|---------------|---------------|------------------------|------|-------|---------------------|----------------------|----------------------|
|   | GOA           | BSAI | GOA               | BSAI          | Total         | GOA                    | BSAI | Total | GOA                 | BSAI                 | Total                |
| AFA CPs   | 366           | 366  | 0                 | 3,266         | 3,266         | 0                      | 17   | 17    | \$ -                | \$ 1,195,356         | \$ 1,195,356         |
| CPs in GOA Rockfish Pilot Program                         | 366           | 366  | 77                | 0             | 77            | 7                      | 0    | 7     | \$ 28,182           | \$ -                 | \$ 28,182            |
| Sablefish CPs >= 60'                                      | 366           | 366  | 1,008             | 995           | 2,003         | 10                     | 15   | 18    | \$ 368,758          | \$ 364,173           | \$ 732,931           |
| Sablefish CPs 50' - 59.9'                                 | 366           | 366  | 113               | 20            | 133           | 1                      | 1    | 2     |                     |                      |                      |
| Halibut IFQ CPs   | 366           | 366  | 79                | 76            | 155           | 6                      | 3    | 7     | \$ 28,905           | \$ 27,889            | \$ 56,794            |
| Non-Specified Trawl CPs >=60'                             | 366           | 366  | 557               | 4,714         | 5,271         | 14                     | 22   | 24    | \$ 203,862          | \$ 1,725,324         | \$ 1,929,186         |
| Non-Specified Fixed Gear CPs >= 60'                       | 366           | 366  | 619               | 7,497         | 8,115         | 17                     | 42   | 43    | \$ 226,497          | \$ 2,743,758         | \$ 2,970,255         |
| Fixed Gear CPs 50' - 59.9'                                | 366           | 366  | 139               | 29            | 168           | 2                      | 1    | 2     |                     |                      |                      |
| Catcher Vessels in GOA Rockfish Pilot Program             | 366           | 366  | 311               | 0             | 311           | 26                     | 0    | 26    | \$ 113,826          | \$ -                 | \$ 113,826           |
| Sablefish IFQ CVs >= 60'                                  | 467           | 467  | 669               | 476           | 1,145         | 42                     | 13   | 51    | \$ 208,052          | \$ 23,181            | \$ 231,233           |
| Sablefish CVs 50 - 59.9'                                  | 467           | 467  | 1,021             | 262           | 1,283         | 97                     | 11   | 104   | \$ 281,554          | \$ 31,371            | \$ 312,925           |
| Sablefish CVs 40 - 49.9'                                  | 467           | 467  | 257               | 81            | 338           | 51                     | 3    | 52    | \$ 46,126           | \$ 5,139             | \$ 51,265            |
| Sablefish IFQ CVs < 40'                                   | 467           | 467  | 99                | 0             | 99            | 16                     | 0    | 16    | \$ 9,210            | \$ -                 | \$ 9,210             |
| Halibut IFQ CVs >=40'                                     | 467           | 467  | 6,743             | 656           | 7,399         | 614                    | 72   | 643   | \$ 1,224,167        | \$ 245,756           | \$ 1,469,923         |
| Halibut IFQ CVs <40'                                      | 467           | 467  | 5,957             | 6,330         | 12,287        | 463                    | 257  | 708   | \$ 231,876          | \$ 21,440            | \$ 253,316           |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 467           | 366  | 0                 | 5,763         | 5,763         | 0                      | 82   | 82    | \$ -                | \$ 2,109,258         | \$ 2,109,258         |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 467           | 467  | 760               | 993           | 1,753         | 20                     | 84   | 84    | \$ 124,039          | \$ 455,946           | \$ 579,985           |
| Catcher Vessels >= 60' trawl non-AFA                      | 467           | 467  | 1,382             | 1,207         | 2,589         | 25                     | 21   | 40    | \$ 520,733          | \$ 189,284           | \$ 710,017           |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 467           | 467  | 739               | 15            | 754           | 27                     | 3    | 27    | \$ 244,314          | \$ 14,175            | \$ 258,488           |
| Catcher Vessels >= 60' Fixed gear                         | 467           | 467  | 795               | 1,189         | 1,983         | 104                    | 74   | 138   | \$ 177,779          | \$ 293,236           | \$ 471,015           |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 467           | 467  | 1,891             | 464           | 2,355         | 293                    | 43   | 300   | \$ 330,034          | \$ 112,770           | \$ 442,804           |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 467           | 467  | 815               | 181           | 996           | 339                    | 20   | 347   | \$ 86,760           | \$ 22,230            | \$ 108,990           |
| Catcher Vessels < 40' Fixed gear                          | 467           | 467  | 415               | 148           | 563           | 491                    | 268  | 744   | \$ 29,499           | \$ 1,997             | \$ 31,497            |
| <b>Total CVs (excludes IFQ - halibut and sablefish)</b>   |               |      | <b>6,796</b>      | <b>9,959</b>  | <b>16,755</b> |                        |      |       | <b>\$ 1,513,158</b> | <b>\$ 3,198,896</b>  | <b>\$ 4,712,054</b>  |
| Motherships AFA and Non-AFA                               | 366           | 366  | 73                | 465           | 538           |                        |      | 11    | \$ 26,718           | \$ 170,190           | \$ 196,908           |
| Shore-based/Floating processors (AFA)                     | 467           | 366  | 0                 | 779           | 779           |                        |      | 7     | \$ -                | \$ 285,114           | \$ 285,114           |
| Shore-based/Floating processors (non-AFA)                 | 467           | 467  | 5,204             | 1,180         | 6,384         |                        |      | 24    | \$ -                | \$ -                 | \$ -                 |
| <b>Total</b>  |               |      | <b>29,721</b>     | <b>36,785</b> | <b>66,506</b> |                        |      |       | <b>\$ 4,603,122</b> | <b>\$ 10,055,521</b> | <b>\$ 14,658,644</b> |
| <b>Total (restructured only) (467 cells)</b>              |               |      | <b>26,746</b>     | <b>13,181</b> | <b>39,927</b> |                        |      |       | <b>\$ 3,514,142</b> | <b>\$ 1,416,525</b>  | <b>\$ 4,930,668</b>  |

<sup>2</sup> All restructured sectors, including halibut and sablefish, would pay a 2% fee in the first two years of the program. See Appendix 11, Table 11-6 Alternative 3 for those results (pp. A-72 through A-74).

DRAFT – Results of AP motion on observer restructuring

| Sector  | Observer Days Purchased (P1) |        |        | Rate Purchased P1 |      |       | Observer Rate Required |      | P2 Observer Days Required (P2) |       |        |
|---|------------------------------|--------|--------|-------------------|------|-------|------------------------|------|--------------------------------|-------|--------|
|   | GOA                          | BSAI   | Total  | GOA               | BSAI | Total | GOA                    | BSAI | GOA                            | BSAI  | Total  |
| AFA CPs   | 0                            | 3,266  | 3,266  | 0.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 0                              | 3,266 | 3,266  |
| CPs in GOA Rockfish Pilot Program                         | 77                           | 0      | 77     | 1.00              | 0.00 | 1.00  | 1.00                   | 1.00 | 77                             | 0     | 77     |
| Sablefish CPs >= 60'                                      | 1,008                        | 995    | 2,003  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 1,008                          | 995   | 2,003  |
| Sablefish CPs 50' - 59.9'                                 |                              |        |        |                   |      |       | 1.00                   | 1.00 | 113                            | 20    | 133    |
| Halibut IFQ CPs   | 79                           | 76     | 155    | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 79                             | 76    | 155    |
| Non-Specified Trawl CPs >=60'                             | 557                          | 4,714  | 5,271  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 557                            | 4,714 | 5,271  |
| Non-Specified Fixed Gear CPs >= 60'                       | 619                          | 7,497  | 8,115  | 1.00              | 1.00 | 1.00  | 1.00                   | 1.00 | 619                            | 7,497 | 8,115  |
| Fixed Gear CPs 50' - 59.9'                                |                              |        |        |                   |      |       | 1.00                   | 1.00 | 139                            | 29    | 168    |
| Catcher Vessels in GOA Rockfish Pilot Program             | 311                          | 0      | 311    | 1.00              | 0.00 | 1.00  | 1.00                   | 1.00 | 311                            | 0     | 311    |
| Sablefish IFQ CVs >= 60'                                  | 446                          | 50     | 495    | 0.67              | 0.10 | 0.43  | 0.30                   | 0.30 | 201                            | 143   | 344    |
| Sablefish CVs 50 - 59.9'                                  | 603                          | 67     | 670    | 0.59              | 0.26 | 0.52  | 0.30                   | 0.30 | 306                            | 79    | 385    |
| Sablefish CVs 40 - 49.9'                                  | 99                           | 11     | 110    | 0.38              | 0.14 | 0.32  | 0.30                   | 0.30 | 77                             | 24    | 101    |
| Sablefish IFQ CVs < 40'                                   | 20                           | 0      | 20     | 0.20              | 0.00 | 0.20  | 0.30                   | 0.30 | 30                             | 0     | 30     |
| Halibut IFQ CVs >=40'                                     | 2,621                        | 526    | 3,148  | 0.39              | 0.80 | 0.43  | 0.30                   | 0.30 | 2,023                          | 197   | 2,220  |
| Halibut IFQ CVs <40'                                      | 497                          | 46     | 542    | 0.08              | 0.01 | 0.04  | 0.30                   | 0.30 | 1,787                          | 1,899 | 3,686  |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 0                            | 5,763  | 5,763  | 0.00              | 1.00 | 1.00  | 1.00                   | 0.00 | 0                              | 0     | 0      |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 266                          | 976    | 1,242  | 0.35              | 0.98 | 0.71  | 0.30                   | 0.30 | 228                            | 298   | 526    |
| Catcher Vessels >= 60' trawl non-AFA                      | 1,115                        | 405    | 1,520  | 0.81              | 0.34 | 0.59  | 0.30                   | 0.30 | 415                            | 362   | 777    |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | 523                          | 30     | 554    | 0.71              | 2.02 | 0.73  | 0.30                   | 0.30 | 222                            | 5     | 226    |
| Catcher Vessels >= 60' Fixed gear                         | 381                          | 628    | 1,009  | 0.48              | 0.53 | 0.51  | 0.30                   | 0.30 | 238                            | 357   | 595    |
| Catcher Vessels 50' - 59.9' Fixed gear                    | 707                          | 241    | 948    | 0.37              | 0.52 | 0.40  | 0.30                   | 0.30 | 567                            | 139   | 706    |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 186                          | 48     | 233    | 0.23              | 0.26 | 0.23  | 0.30                   | 0.30 | 244                            | 54    | 299    |
| Catcher Vessels < 40' Fixed gear                          | 63                           | 4      | 67     | 0.15              | 0.03 | 0.12  | 0.30                   | 0.30 | 124                            | 44    | 169    |
| Total CVs (excludes IFQ - halibut and sablefish)          | 3,240                        | 8,096  | 11,336 | 0.48              | 0.81 | 0.68  |                        |      | 2,039                          | 1,259 | 3,298  |
| Processors Motherships AFA and Non-AFA                    | 73                           | 465    | 538    | 1.00              | 1.00 | 1.00  | 0.00                   | 0.00 | 0                              | 0     | 0      |
| Shore-based/Floating processors (AFA)                     | 0                            | 779    | 779    | NA                | 1.00 | 1.00  | 1.00                   | 0.00 | 0                              | 0     | 0      |
| Shore-based/Floating processors (non-AFA)                 | 0                            | 0      | 0      | NA                | NA   | 0.00  | 0.30                   | 0.30 | 1,561                          | 354   | 1,915  |
| Total   | 10,500                       | 26,637 | 37,137 |                   |      |       |                        |      |                                |       |        |
| Total (restructured only) (467 cells)                     | 7,525                        | 3,033  | 10,558 | 0.28              | 0.23 | 0.26  | 0.30                   | 0.30 | 8,024                          | 3,954 | 11,978 |

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| Sector  | Revenue Required (P2) |              |              | P2 Over-Under (days) |        |        | P2 Over-Under (Revenue) |              |                |
|---|-----------------------|--------------|--------------|----------------------|--------|--------|-------------------------|--------------|----------------|
|   | GOA                   | BSAI         | Total        | GOA                  | BSAI   | Total  | GOA                     | BSAI         | Total          |
| AFA CPs   | \$ -                  | \$ 1,195,356 | \$ 1,195,356 | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| CPs in GOA Rockfish Pilot Program                         | \$ 28,182             | \$ -         | \$ 28,182    | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Sablefish CPs >= 60'                                      | \$ 368,758            | \$ 364,173   | \$ 732,931   | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Sablefish CPs 50' - 59.9'                                 | \$ 41,358             | \$ 7,320     | \$ 48,678    |                      |        |        |                         |              |                |
| Halibut IFQ CPs   | \$ 28,905             | \$ 27,889    | \$ 56,794    | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Non-Specified Trawl CPs >=60'                             | \$ 203,862            | \$ 1,725,324 | \$ 1,929,186 | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Non-Specified Fixed Gear CPs >= 60'                       | \$ 226,497            | \$ 2,743,758 | \$ 2,970,255 | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Fixed Gear CPs 50' - 59.9'                                | \$ 50,874             | \$ 10,614    | \$ 61,488    |                      |        |        |                         |              |                |
| Catcher Vessels in GOA Rockfish Pilot Program             | \$ 113,826            | \$ -         | \$ 113,826   | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Sablefish IFQ CVs >= 60'                                  | \$ 93,727             | \$ 66,688    | \$ 160,415   | 245                  | -93    | 152    | \$ 114,325              | \$ (43,506)  | \$ 70,819      |
| Sablefish CVs 50 - 59.9'                                  | \$ 143,042            | \$ 36,706    | \$ 179,748   | 297                  | -11    | 285    | \$ 138,512              | \$ (5,335)   | \$ 133,176     |
| Sablefish CVs 40 - 49.9'                                  | \$ 36,006             | \$ 11,348    | \$ 47,354    | 22                   | -13    | 8      | \$ 10,120               | \$ (6,209)   | \$ 3,911       |
| Sablefish IFQ CVs < 40'                                   | \$ 13,870             | \$ -         | \$ 13,870    | -10                  | 0      | -10    | \$ (4,660)              | \$ -         | \$ (4,660)     |
| Halibut IFQ CVs >=40'                                     | \$ 944,694            | \$ 91,906    | \$ 1,036,600 | 598                  | 329    | 928    | \$ 279,473              | \$ 153,850   | \$ 433,323     |
| Halibut IFQ CVs <40'                                      | \$ 834,576            | \$ 886,833   | \$ 1,721,409 | -1,291               | -1,853 | -3,144 | \$ (602,700)            | \$ (865,393) | \$ (1,468,093) |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | \$ -                  | \$ -         | \$ -         | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | \$ 106,470            | \$ 139,062   | \$ 245,532   | 38                   | 679    | 716    | \$ 17,569               | \$ 316,885   | \$ 334,453     |
| Catcher Vessels >= 60' trawl non-AFA                      | \$ 193,618            | \$ 169,101   | \$ 362,719   | 700                  | 43     | 744    | \$ 327,115              | \$ 20,183    | \$ 347,298     |
| Catcher Vessels 50' - 59.9' trawl non-AFA                 | \$ 103,534            | \$ 2,102     | \$ 105,635   | 301                  | 26     | 327    | \$ 140,780              | \$ 12,073    | \$ 152,853     |
| Catcher Vessels >= 60' Fixed gear                         | \$ 111,311            | \$ 166,557   | \$ 277,868   | 142                  | 271    | 414    | \$ 66,468               | \$ 126,679   | \$ 193,148     |
| Catcher Vessels 50' - 59.9' Fixed gear                    | \$ 264,886            | \$ 65,029    | \$ 329,915   | 140                  | 102    | 242    | \$ 65,148               | \$ 47,741    | \$ 112,889     |
| Catcher Vessels 40' - 49.9' Fixed gear                    | \$ 114,165            | \$ 25,312    | \$ 139,477   | -59                  | -7     | -65    | \$ (27,405)             | \$ (3,082)   | \$ (30,487)    |
| Catcher Vessels < 40' Fixed gear                          | \$ 58,141             | \$ 20,735    | \$ 78,876    | -61                  | -40    | -101   | \$ (28,642)             | \$ (18,738)  | \$ (47,380)    |
| Total CVs (excludes IFQ - halibut and sablefish)          | \$ 952,126            | \$ 587,897   | \$ 1,540,022 | 1,201                | 1,074  | 2,276  | \$ 561,033              | \$ 501,741   | \$ 1,062,774   |
| Processors  |                       |              |              |                      |        |        |                         |              |                |
| Motherships AFA and Non-AFA                               | \$ -                  | \$ -         | \$ -         | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Shore-based/Floating processors (AFA)                     | \$ -                  | \$ -         | \$ -         | 0                    | 0      | 0      | \$ -                    | \$ -         | \$ -           |
| Shore-based/Floating processors (non-AFA)                 | \$ 729,080            | \$ 165,318   | \$ 894,398   | -1,561               | -354   | -1,915 | \$ (729,080)            | \$ (165,318) | \$ (894,398)   |
| Total   |                       |              |              |                      |        |        |                         |              |                |
| Total (restructured only) (467 cells)                     | \$ 3,747,121          | \$ 1,846,695 | \$ 5,593,816 | -499                 | -921   | -1,420 | \$ (232,978)            | \$ (430,170) | \$ (663,148)   |

*Date*

**Summary revenue and coverage estimates based on October 2010 observer program analysis (page 117) and C-1 supplementals**

**Restructured component under Alternative 3:**

30%, P2 coverage requirements (see C-1 supplementals)

|      | No coverage<br>on < 40' | Coverage on <<br>40' |
|------|-------------------------|----------------------|
| Days | 8,093                   | 11,978               |
| Cost | 3,779,661               | 5,593,816            |

Coverage funded under various options (see analysis Table 54, page 117)

|                      | 1% fee    | 1.1% fee* | 1.2% fee* | 1.25% fee* | 1.5% fee  | 2% fee    |
|----------------------|-----------|-----------|-----------|------------|-----------|-----------|
| Days (revenue/\$467) | 7,222     | 7,944     | 8,666     | 9,027      | 10,833    | 14,443    |
| Revenue              | 3,372,521 | 3,709,773 | 4,047,025 | 4,215,651  | 5,058,782 | 6,745,043 |

*\*Estimates not explicitly shown in Table 54*



NARS

|   |               |      |                   |        |        |                        |      |       |              |               |               |                           | Alternative |  |
|---|---------------|------|-------------------|--------|--------|------------------------|------|-------|--------------|---------------|---------------|---------------------------|-------------|--|
| Sector  | Fee Structure |      | Sea-days realized |        |        | Number of Participants |      |       | Cost 2008    |               |               | Observer Data Purchased ( |             |  |
|   | GOA           | BSAI | GOA               | BSAI   | Total  | GOA                    | BSAI | Total | GOA          | BSAI          | Total         | GOA                       | BSAI        |  |
| AFA CPs   | 366           | 366  | 0                 | 3,266  | 3,266  | 0                      | 17   | 17    | \$ -         | \$ 1,195,356  | \$ 1,195,356  | 0                         | 3,266       |  |
| CPs in GOA Rockfish Pilot Program                         | 366           | 366  | 77                | 0      | 77     | 7                      | 0    | 7     | \$ 28,182    | \$ -          | \$ 28,182     | 77                        | 0           |  |
| Sablefish CPs >= 60'                                      | 366           | 366  | 1,008             | 995    | 2,003  | 10                     | 15   | 18    | \$ 368,758   | \$ 364,173    | \$ 732,931    | 1,008                     | 995         |  |
| Sablefish CPs 50' - 59.9'                                 | 366           | 366  | 113               | 20     | 133    | 1                      | 1    | 2     |              |               |               |                           |             |  |
| Halibut IFQ CPs   | 366           | 366  | 79                | 76     | 155    | 6                      | 3    | 7     | \$ 28,905    | \$ 27,889     | \$ 56,794     | 79                        | 76          |  |
| Non-Specified Trawl CPs >=60'                             | 366           | 366  | 557               | 4,714  | 5,271  | 14                     | 22   | 24    | \$ 203,862   | \$ 1,725,324  | \$ 1,929,186  | 557                       | 4,714       |  |
| Non-Specified Fixed Gear CPs >= 60'                       | 366           | 366  | 619               | 7,497  | 8,115  | 17                     | 42   | 43    | \$ 226,497   | \$ 2,743,758  | \$ 2,970,255  | 619                       | 7,497       |  |
| Fixed Gear CPs 50' - 59.9'                                | 366           | 366  | 139               | 29     | 168    | 2                      | 1    | 2     |              |               |               |                           |             |  |
| Catcher Vessels in GOA Rockfish Pilot Program             | 366           | 366  | 311               | 0      | 311    | 26                     | 0    | 26    | \$ 113,826   | \$ -          | \$ 113,826    | 311                       | 0           |  |
| Sablefish IFQ CVs >= 60'                                  | 467           | 467  | 669               | 476    | 1,145  | 42                     | 13   | 51    | \$ 332,883   | \$ 37,090     | \$ 369,973    | 713                       | 79          |  |
| Sablefish CVs 57.5-59.9                                   | 467           | 467  | 733               | 160    | 893    | 57                     | 7    | 61    | \$ 313,598   | \$ 34,941     | \$ 435,674    | 672                       | 75          |  |
| Sablefish CVs 50-57.4                                     | 467           | 467  | 288               | 102    | 390    | 40                     | 4    | 43    | \$ 136,889   | \$ 15,252     | \$ 190,176    | 293                       | 33          |  |
| Sablefish CVs 40 - 49.9'                                  | 467           | 467  | 257               | 81     | 338    | 51                     | 3    | 52    | \$ 73,801    | \$ 8,223      | \$ 82,024     | 158                       | 18          |  |
| Sablefish IFQ CVs < 40'                                   | 467           | 467  | 99                | 0      | 99     | 16                     | 0    | 16    | \$ 14,735    | \$ -          | \$ 14,735     | 32                        | 0           |  |
| Halibut IFQ CVs >= 60'                                    | 467           | 467  | 879               | 152    | 1,031  | 77                     | 27   | 83    | \$ 584,885   | \$ 117,418    | \$ 702,303    | 1,252                     | 251         |  |
| Halibut IFQ CVs 57.5 - 59.9'                              | 467           | 467  | 1,234             | 176    | 1,410  | 112                    | 18   | 118   | \$ 627,539   | \$ 125,981    | \$ 753,520    | 1,344                     | 270         |  |
| Halibut IFQ CVs 40 - 57.4'                                | 467           | 467  | 4,639             | 335    | 4,974  | 425                    | 27   | 442   | \$ 746,243   | \$ 149,811    | \$ 896,054    | 1,598                     | 321         |  |
| Halibut IFQ CVs <40'                                      | 467           | 467  | 5,957             | 6,330  | 12,287 | 463                    | 257  | 708   | \$ 371,002   | \$ 34,304     | \$ 405,306    | 794                       | 73          |  |
| Catcher Vessels >= 60' trawl AFA (BS Pollock Targets)     | 467           | 366  | 0                 | 5,763  | 5,763  | 0                      | 82   | 82    | \$ -         | \$ 2,109,258  | \$ 2,109,258  | 0                         | 5,763       |  |
| Catcher Vessels >= 60' trawl AFA (BS Non-Pollock Targets) | 467           | 467  | 760               | 993    | 1,753  | 20                     | 84   | 84    | \$ 99,231    | \$ 364,757    | \$ 463,988    | 212                       | 781         |  |
| Catcher Vessels >= 60' trawl non-AFA                      | 467           | 467  | 1,382             | 1,207  | 2,589  | 25                     | 21   | 40    | \$ 416,587   | \$ 151,427    | \$ 568,013    | 892                       | 324         |  |
| Catcher Vessels 57.5' - 59.9' trawl non-AFA               | 467           | 467  | 739               | 15     | 754    | 27                     | 3    | 27    | \$ 195,451   | \$ 11,340     | \$ 206,790    | 419                       | 24          |  |
| Catcher Vessels 50' - 57.4' trawl non-AFA                 | 467           | 467  | 0                 | 0      | 0      | 0                      | 0    | 0     | \$ -         | \$ -          | \$ -          | 0                         | 0           |  |
| Catcher Vessels >= 60' Fixed gear                         | 467           | 467  | 795               | 1,189  | 1,983  | 104                    | 74   | 138   | \$ 142,223   | \$ 234,589    | \$ 376,812    | 305                       | 502         |  |
| Catcher Vessels 57.5' - 59.9' Fixed gear                  | 467           | 467  | 1,233             | 366    | 1,599  | 149                    | 31   | 153   | \$ 54,233    | \$ 2,977      | \$ 57,210     | 116                       | 6           |  |
| Catcher Vessels 50' - 57.4' Fixed gear                    | 467           | 467  | 658               | 98     | 756    | 144                    | 12   | 147   | \$ 209,794   | \$ 87,239     | \$ 297,033    | 449                       | 187         |  |
| Catcher Vessels 40' - 49.9' Fixed gear                    | 467           | 467  | 815               | 181    | 996    | 339                    | 20   | 347   | \$ 69,408    | \$ 17,784     | \$ 87,192     | 149                       | 38          |  |
| Catcher Vessels < 40' Fixed gear                          | 467           | 467  | 415               | 148    | 563    | 491                    | 268  | 744   | \$ 23,600    | \$ 1,598      | \$ 25,197     | 51                        | 3           |  |
| Total CVs (excludes IFQ - halibut and sablefish)          |               |      | 6,796             | 9,959  | 16,755 |                        |      |       | \$ 1,210,527 | \$ 2,980,968  | \$ 4,191,495  | 2,592                     | 7,630       |  |
| Processors Motherships AFA and Non-AFA                    | 366           | 366  | 73                | 465    | 538    |                        |      | 11    | \$ 26,718    | \$ 170,190    | \$ 196,908    | 73                        | 465         |  |
| Shore-based/Floating processors (AFA)                     | 467           | 366  | 0                 | 779    | 779    |                        |      | 7     | \$ -         | \$ 285,114    | \$ 285,114    | 0                         | 779         |  |
| Shore-based/Floating processors (non-AFA)                 | 467           | 467  | 5,204             | 1,180  | 6,384  |                        |      | 24    | \$ -         | \$ -          | \$ -          | 0                         | 0           |  |
| Total   |               |      | 29,731            | 36,792 | 66,523 |                        |      |       | \$ 5,501,081 | \$ 10,033,727 | \$ 15,534,808 | 12,423                    | 26,590      |  |
| Total (restructured only) (467 cells)                     |               |      | 26,755            | 13,188 | 39,943 |                        |      |       | \$ 4,412,101 | \$ 1,394,730  | \$ 5,806,832  | 9,448                     | 2,987       |  |

0.80



| Days P1) | Rate Purchased P1 |      |      | Observer Rate Required |      | P2 Observer Days Required (P2) |       |       | Revenue Required (P2) |              |              | P2 Over-Under (days) |      |        | P2 Over-Under (Revenue) |              |              |
|----------|-------------------|------|------|------------------------|------|--------------------------------|-------|-------|-----------------------|--------------|--------------|----------------------|------|--------|-------------------------|--------------|--------------|
|          | Total             | GOA  | BSAI | Total                  | GOA  | BSAI                           | GOA   | BSAI  | Total                 | GOA          | BSAI         | Total                | GOA  | BSAI   | Total                   | GOA          | BSAI         |
| 3,266    | 0.00              | 1.00 | 1.00 | 1.00                   | 1.00 | 0                              | 3,266 | 3,266 | \$ -                  | \$ 1,195,356 | \$ 1,195,356 | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 77       | 1.00              | 0.00 | 1.00 | 1.00                   | 1.00 | 77                             | 0     | 77    | \$ 28,182             | \$ -         | \$ 28,182    | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 2,003    | 1.00              | 1.00 | 1.00 | 1.00                   | 1.00 | 1,008                          | 995   | 2,003 | \$ 368,758            | \$ 364,173   | \$ 732,931   | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
|          |                   |      |      | 1.00                   | 1.00 | 113                            | 20    | 133   | \$ 41,358             | \$ 7,320     | \$ 48,678    |                      |      |        |                         |              |              |
| 155      | 1.00              | 1.00 | 1.00 | 1.00                   | 1.00 | 79                             | 76    | 155   | \$ 28,905             | \$ 27,889    | \$ 56,794    | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 5,271    | 1.00              | 1.00 | 1.00 | 1.00                   | 1.00 | 557                            | 4,714 | 5,271 | \$ 203,862            | \$ 1,725,324 | \$ 1,929,186 | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 8,115    | 1.00              | 1.00 | 1.00 | 1.00                   | 1.00 | 619                            | 7,497 | 8,115 | \$ 226,497            | \$ 2,743,758 | \$ 2,970,255 | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
|          |                   |      |      | 1.00                   | 1.00 | 139                            | 29    | 168   | \$ 50,874             | \$ 10,614    | \$ 61,488    |                      |      |        |                         |              |              |
| 311      | 1.00              | 0.00 | 1.00 | 1.00                   | 1.00 | 311                            | 0     | 311   | \$ 113,826            | \$ -         | \$ 113,826   | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 792      | 1.07              | 0.17 | 0.69 | 0.30                   | 0.30 | 201                            | 143   | 344   | \$ 93,727             | \$ 66,688    | \$ 160,415   | 512                  | -63  | 449    | \$ 239,156              | \$ (29,598)  | \$ 209,559   |
| 746      | 0.92              | 0.47 | 0.84 | 0.30                   | 0.30 | 220                            | 48    | 268   | \$ 102,693            | \$ 22,416    | \$ 125,109   | 452                  | 27   | 478    | \$ 210,904              | \$ 12,525    | \$ 223,430   |
| 326      | 1.02              | 0.32 | 0.84 | 0.30                   | 0.30 | 86                             | 31    | 117   | \$ 40,349             | \$ 14,290    | \$ 54,639    | 207                  | 2    | 209    | \$ 96,540               | \$ 962       | \$ 97,502    |
| 176      | 0.61              | 0.22 | 0.52 | 0.30                   | 0.30 | 77                             | 24    | 101   | \$ 36,006             | \$ 11,348    | \$ 47,354    | 81                   | -7   | 74     | \$ 37,795               | \$ (3,125)   | \$ 34,670    |
| 32       | 0.32              | 0    | 0.32 | 0.30                   | 0.30 |                                |       |       | \$ -                  | \$ -         | \$ -         | 32                   | 0    | 32     | \$ 14,735               | \$ -         | \$ 14,735    |
| 1,504    | 1.42              | 1.65 | 1.46 | 0.30                   | 0.30 | 264                            | 46    | 309   | \$ 123,148            | \$ 21,295    | \$ 144,443   | 989                  | 206  | 1,195  | \$ 461,737              | \$ 96,122    | \$ 557,860   |
| 1,614    | 1.09              | 1.53 | 1.14 | 0.30                   | 0.30 | 370                            | 53    | 423   | \$ 172,883            | \$ 24,658    | \$ 197,541   | 974                  | 217  | 1,191  | \$ 454,656              | \$ 101,323   | \$ 555,979   |
| 1,919    | 0.34              | 0.96 | 0.39 | 0.30                   | 0.30 | 1,392                          | 101   | 1,492 | \$ 649,924            | \$ 46,934    | \$ 696,857   | 206                  | 220  | 427    | \$ 96,319               | \$ 102,877   | \$ 199,196   |
| 868      | 0.13              | 0.01 | 0.07 | 0.30                   | 0.30 |                                |       |       | \$ -                  | \$ -         | \$ -         | 794                  | 73   | 868    | \$ 371,002              | \$ 34,304    | \$ 405,306   |
| 5,763    | 0.00              | 1.00 | 1.00 | 1.00                   | 0.00 | 0                              | 0     | 0     | \$ -                  | \$ -         | \$ -         | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 994      | 0.28              | 0.79 | 0.57 | 0.30                   | 0.30 | 228                            | 298   | 526   | \$ 106,470            | \$ 139,062   | \$ 245,532   | -16                  | 483  | 468    | \$ (7,239)              | \$ 225,695   | \$ 218,456   |
| 1,216    | 0.65              | 0.27 | 0.47 | 0.30                   | 0.30 | 415                            | 362   | 777   | \$ 193,618            | \$ 169,101   | \$ 362,719   | 477                  | -38  | 440    | \$ 222,968              | \$ (17,674)  | \$ 205,294   |
| 554      | 0.57              | 1.62 | 0.73 | 0.30                   | 0.30 | 222                            | 5     | 226   | \$ 103,534            | \$ 2,102     | \$ 105,635   | 197                  | 20   | 217    | \$ 91,917               | \$ 9,238     | \$ 101,155   |
| 0        | 0.00              | 0.00 | 0.00 | 0.00                   | 0.00 | 0                              | 0     | 0     | \$ -                  | \$ -         | \$ -         | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 807      | 0.38              | 0.42 | 0.41 | 0.30                   | 0.30 | 238                            | 357   | 595   | \$ 111,311            | \$ 166,557   | \$ 277,868   | 66                   | 146  | 212    | \$ 30,912               | \$ 68,032    | \$ 98,944    |
| 123      | 0.09              | 0.02 | 0.08 | 0.30                   | 0.30 | 370                            | 110   | 480   | \$ 172,743            | \$ 51,277    | \$ 224,020   | -254                 | -103 | -357   | \$ (118,510)            | \$ (48,299)  | \$ (166,809) |
| 636      | 0.68              | 1.91 | 0.84 | 0.30                   | 0.30 | 197                            | 29    | 227   | \$ 92,186             | \$ 13,730    | \$ 105,916   | 252                  | 157  | 409    | \$ 117,608              | \$ 73,509    | \$ 191,117   |
| 187      | 0.18              | 0.21 | 0.19 | 0.30                   | 0.30 | 244                            | 54    | 299   | \$ 114,165            | \$ 25,312    | \$ 139,477   | -96                  | -16  | -112   | \$ (44,757)             | \$ (7,528)   | \$ (52,285)  |
| 54       | 0.12              | 0.02 | 0.10 | 0.30                   | 0.30 |                                |       |       | \$ -                  | \$ -         | \$ -         | 51                   | 3    | 54     | \$ 23,600               | \$ 1,598     | \$ 25,197    |
| 10,332   | 0.38              | 0.77 | 0.62 |                        |      | 1,914                          | 1,214 | 3,129 | \$ 894,027            | \$ 567,139   | \$ 1,461,166 | 678                  | 652  | 1,330  | \$ 316,499              | \$ 304,571   | \$ 621,070   |
| 538      | 1.00              | 1.00 | 1.00 | 0.00                   | 0.00 | 0                              | 0     | 0     | \$ -                  | \$ -         | \$ -         | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 779      | NA                | 1.00 | 1.00 | 1.00                   | 0.00 | 0                              | 0     | 0     | \$ -                  | \$ -         | \$ -         | 0                    | 0    | 0      | \$ -                    | \$ -         | \$ -         |
| 0        | NA                | NA   | 0.00 | 0.30                   | 0.30 | 1,561                          | 354   | 1,915 | \$ 729,080            | \$ 165,318   | \$ 894,398   | -1,561               | -354 | -1,915 | \$ (729,080)            | \$ (165,318) | \$ (894,398) |
| 39,013   |                   |      |      |                        |      |                                |       |       |                       |              |              |                      |      |        |                         |              |              |
| 12,434   | 0.35              | 0.23 | 0.31 | 0.20                   |      | 6,085                          | 2,013 | 8,098 | \$ 2,841,838          | \$ 940,085   | \$ 3,781,923 | 3,362                | 974  | 4,336  | \$ 1,570,263            | \$ 454,645   | \$ 2,024,909 |

\$ 2,024,909  
4,335.99  
0.33

| Totals         | Surplus revenue | 40d    | Coverage possi totald | Coverage possible unobserved fleet (total buffer- all sea days for fleet) |
|----------------|-----------------|--------|-----------------------|---|
| 1.1 3,781,923  | 210,274         | 12,949 | 0.03                  | 39,943  |
| 1.25 3,781,923 | 754,664         | 12,949 | 0.12                  | 39,943  |
| 1.3 3,781,923  | 936,128         | 12,949 | 0.15                  | 39,943  |
| 1.4 3,781,923  | 1,299,055       | 12,949 | 0.21                  | 39,943  |
| 1.5 3,781,923  | 1,661,982       | 12,949 | 0.27                  | 39,943  |
| 1.6 3,781,923  | 2,024,909       | 12,949 | 0.33                  | 39,943  |
| 1.75 3,781,923 | 2,569,299       | 12,949 | 0.42                  | 39,943  |

### Alternative 3 Excess funds and coverage rate achieved by not deploying on vessels under 40'.

