6.0 POLLOCK INDUSTRY IMPACT ANALYSIS

This section examines the expected potential impacts on the pollock industry's gross revenues attributable to potential reductions in pollock products being delivered to market as a result of fishery closure (potentially forgone gross revenue) or due to relocation of effort outside of a closure area (revenue at risk)[32]. To better place these impacts in a comparable empirical context, an analytical approach is adopted here, in which the question evaluated is expressed as follows: "What would the effects of these alternatives have been, had each, in turn, been in place in 2003 through 2011" By posing the analytical question in this way, it is possible to use actual empirical information and official data records on fleet participation, catch composition, production patterns, first wholesale prices, PSC quantities, spatial and temporal distribution of effort, and geographical patterns of deliveries to primary processors or transshipping facilities. These estimates can provide at least a crude empirical measure of the potential economic impact of the alternatives on different fleet sectors. Moreover, if it is assumed that harvest foreclosed to a fleet sector could not have been made up elsewhere by that fleet sector, then the forgone or at-risk estimate becomes an approximation of the potential maximum forgone gross revenues directly attributable to the proposed action.

The Council has chosen to consider the proposed action because of high numbers of non-Chinook salmon PSC in the Bering Sea pollock fishery. The analytical timeframe was chosen because it represents the most recent time period that is most reflective of recent fishing patterns. Those status quo conditions include observed high levels of non-Chinook salmon PSC under present regulations that provide an exemption to Chum Salmon Savings area closures for operators that participate in the VRHS. The analytical period encompasses years when the VRHS was in place, either via industry initiative, via an experimental fishery, or as a formal program under present regulations. Including data prior to 2003 would not be representative of current PSC levels, of current regulations, or of current efforts by industry to avoid non-Chinook PSC.

In addition, in 2003 NMFS implemented the current catch accounting system known as e-landings. Thus, the period of 2003 thorough 2011 is covered by e-landings data. Prior to 2003, a "blend" system was used and differs from the present methodology. These data represents the most consistent and uniform data set available on a sector-specific basis for analysis. Thus, for data consistency, accuracy, and to meet the agency's obligation to use the "best scientific information," the analytical period of 2003-2011 was chosen and NMFS asserts that it is the appropriate analytical period.

The analysts acknowledge that the use of potentially forgone first wholesale gross revenues is not an ideal reflection of the expected economic impacts (or, conversely, benefits if the catch reduction can be mitigated by actions of the operator) attributable to the proposed changes in non-Chinook PSC management. However, in order to estimate "profits," one must have data on costs, not simply revenues. NMFS does not have data to estimate net impacts until such time as the Council develops a socioeconomic data collection program that requires the industry to submit cost data under new MSA authority. These gross receipts may, of course, not be, in any meaningful way, indicative of realized net revenues, but by default serve as the best available "proxy" for economic earnings in these fisheries.

[32] "Revenue at risk" should be regarded as an upper-bound estimate. That is, it represents a projection, based upon historical effort and landings data, of the gross value of the catch that would be forgone as a result of one or more provisions of the proposed action, assuming none of that displaced catch could be made up by shifting effort to another area. In many cases, this will not be the case. Therefore, the true impact on gross revenue is likely to be smaller than the estimated revenue at risk, although that is not assured.

The ability to mathematically derive net economic welfare measures is fundamentally dependent upon empirical data on input prices, costs, capital investment, debt service, consumer demand, sources of supply, market structure, substitutes and complements, measures of consumer responsiveness to changes in price, quantity, quality, income, tastes, and preferences. Exogenous factors also influence rigorous derivation of these welfare measures, such as, currency exchange rates, tariffs, political and economic instability. Very few of these necessary data are available to NMFS, at present. At present, the analysts must employ methods and strategies predicated on extremely limited data and virtually non-existent economic modeling of these resources and uses.

Without accurate verifiable cost data and operational information for the pollock trawl fleets operating in the BSAI, gross revenue estimates constitute the "best" empirical economic information available. NMFS fully acknowledges that changes in first wholesale (or ex-vessel, as appropriate) revenues cannot be regarded as indicative of net results. That said, these estimates represent the current limit of NMFS's ability to empirically characterize the expected outcome for each sector in the pollock fishery, from the changes in non-Chinook PSC management under consideration. And, further, this explains the very extensive reliance upon, and systematic treatment of, "qualitative" cost and benefit analysis, reflected in the RIR, as required under E.O.12866.

It must also be understood that the proposed action is not to close the pollock fishery; it is to create incentives for pollock fishermen to avoid non-Chinook salmon. Thus, the impacts are reported as potentially forgone gross revenue or revenue at risk, depending on alternative, and are not reported as industry losses of revenue. The RIR does not identify these impact estimates as lost revenue specifically because mitigation of the impacts via harvesting behavior changes are expected as that is the point of incentivizing avoidance of PSC. Clearly, the Council's intent is to incentivize non-Chinook salmon PSC avoidance in order to reduce it and the hard cap used in the potentially forgone gross revenue analysis is one part of the incentive. The implication is that the pollock industry will change behavior so that they do not face all of the potential forgone gross revenue, and/or revenue at risk estimated in the analysis as direct losses in revenue due to direct contraction in pollock harvest.

Thus, it is acknowledged that the gross revenue estimates shown in this analysis reflect highly simplified assumptions about the outcome of competing alternative PSC rules. In a sense, they are intended to portray the "worst case" outcome if the pollock fishery was required to forgo a specific catch amount in response to each of the non-Chinook PSC prohibition actions being examined. There is no expectation that this outcome will be realized as a result of any of the proposed non-Chinook PSC management measures under consideration, and these "techniques" are employed solely to provide a crude approximation of the first wholesale gross dollar value associated with unharvested pollock, by sector, processing mode, etc.

Confronted with these facts, NMFS is nonetheless legally obligated to analyze, to the fullest extent practicable, the benefits and costs (as well as their expected distribution) of the proposed management actions being considered. These mandates (e.g., E.O.12866, OMB Circular A-4, MSA) recognize and explicitly provide for adoption of qualitative analytical strategies and approaches to evaluating benefits and costs in the absence of fully adequate empirical data and quantitative models. Thus, this analysis will first provide qualitative discussions of the potential effects. The qualitative treatment is then followed by the revenue analysis.

6.1 Fleet Operational Effects

Under the alternatives to the status quo, fishermen would be expected to attempt to minimize losses associated with potentially forgone gross revenue and/or revenue placed at risk by altering their current operations. These reactions could include the following: (1) mitigating a triggered area closure by re-

deploying fishing effort, using the same fishing gear and methods, to known adjacent fishing grounds that may be equally or only somewhat less productive (similar CPUE) than the fishing grounds lost to the salmon PSC minimization measure; (2) avoiding non-Chinook salmon PSC by re-deploying fishing effort to an area of unknown productivity and operational potential, using the identical fishing gear, in an exploratory mode; (3) switching to a different target fishery if possible; and (4) mitigating the risk of a hard cap induced closure by speeding up harvesting and processing activities (race for fish). Each of these strategies may have operational cost implications as described below. While empirical data on operating cost structure at the vessel or plant level are not available, cost trends for key inputs may shed some light on the probable impacts of the fishing impact minimization alternatives on the pollock industry in the aggregate and on average.

Any regulatory action that requires an operator to alter his or her fishing pattern, whether in time or space, is likely to impose additional costs on that operator. The alternative non-Chinook salmon PSC minimization actions may affect the operating costs of the pollock fleet, compared to the status quo condition, **with the degree of those effects necessarily dictated by the extent to which hard cap and/or triggered closures constrain harvests.** The following sections address this issue in terms of both fixed and variable costs. Fixed costs tend to arise from investment decisions and variable costs arise from short-run production decisions. As the terms imply, fixed costs are those that do not change in the short run, no matter what the level of activity. Variable costs, on the other hand, are those costs that do change directly with the level of activity, recognizing that variable inputs must be used if production exceeds zero.

6.1.1 Fixed Costs

As suggested earlier, many costs confronting operators in these fisheries are fixed; that is, they do not change with the level of production. Fixed costs include such expenses as debt payments, the opportunity cost of the investment in the vessel (or plant), the cost of having the vessel or plant ready to participate in the fisheries, some insurance costs, property taxes, and depreciation. Following an action that negatively affects, for example, CPUE, TAC, or catch share, these fixed costs must be distributed across a smaller volume of product output, raising the average fixed cost per unit of production. As previously noted, available information on the cost structure of operations fishing for and processing pollock is very limited. This is largely so because cost information is often considered highly proprietary by industry members and is, under the best of circumstances, expensive to collect and analyze. Only scattered anecdotal information at the operation level is available on fishing costs (fixed or variable). It is, therefore, impossible to do more than provide a qualitative discussion of the impact of the proposed alternatives on pollock industry's operating costs.

6.1.2 Variable Costs

Of all the categories of variable factor costs, fuel ranks at or near the top of the list of operating expenses in the fisheries under consideration. Even a qualitative evaluation of the elements of the non-Chinook salmon PSC minimization actions of Alternative 3 (e.g., triggered area closures) suggest that the proposed regulatory changes may likely result in the following: 1) longer average trip duration to travel to remaining open fishing grounds; 2) greater total distances traveled per trip, perhaps under more extreme operating conditions. In addition, the non-Chinook salmon PSC minimization actions of Alternative 2 (e.g., hard caps) may induce a race for fish that could result in vessels operating at maximum speed and capacity in order to harvest as much pollock as possible prior to a hard-cap-induced fishery closure. Figure 6-1 provides representative diesel fuel cost information for the Bristol Bay area and for Dutch Harbor. These data, provided by the Pacific States Marine Fisheries Commission Economic Information System, clearly show that diesel fuel prices more than doubled in the region between 2005 and 2008 and

approached $6 per gallon in the Bristol Bay area in 2008. These increases have likely had a severe impact on the variable costs of all fishing operations in the region, including those for non-Chinook salmon. While it is true that some fuel is purchased by the pollock fleet in other areas, such as Seattle, there is, at present, no comprehensive accounting of costs or expenditures in the pollock fishery that would allow analysis of actual fuel consumption and costs.

How changes in running time would affect fuel costs depends on how much fuel must be burned per unit catch. While it is not possible to place a numerical estimate on this factor, it is reasonable to conclude that, on average, total fuel consumption would potentially increase, due to movement to avoid non-Chinook salmon, relative to the status quo under each of the proposed alternatives provided that a hard cap had the potential to be reached and/or a trigger closure level of PSC was expected to be reached. This increased fuel use would apply except in the case of vessels that cease to fish as a result the non-Chinook salmon PSC minimization measures, and perhaps in the case of vessels that switch to a different fishery, although opportunities to do the latter are highly restricted for the AFA pollock fleet.

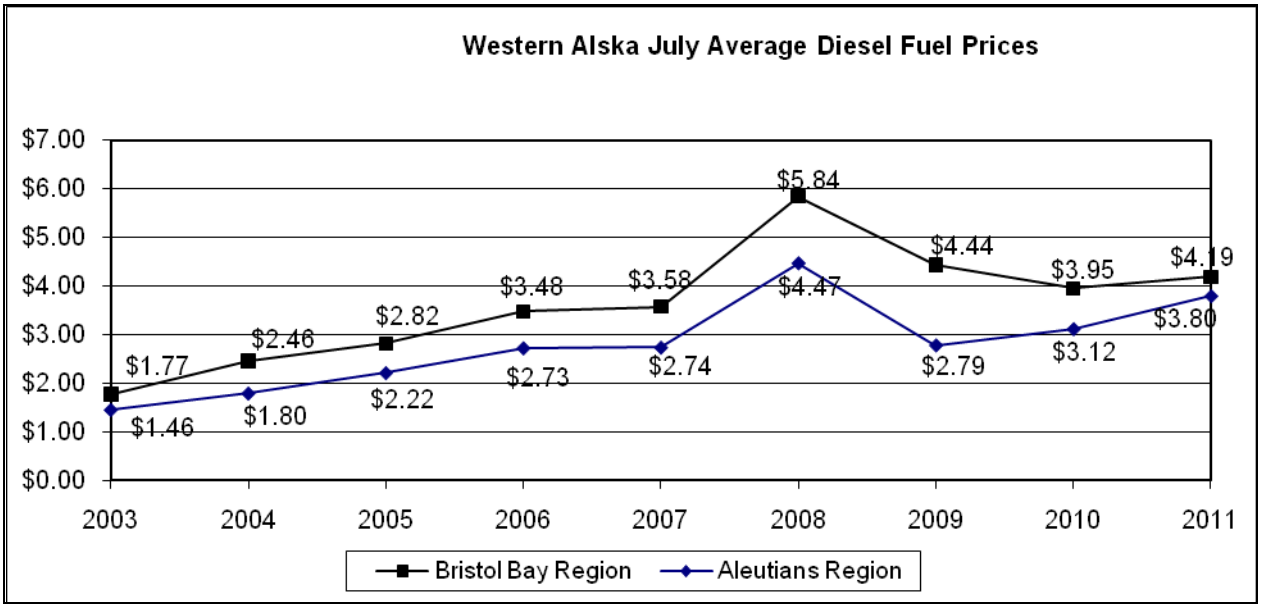

Figure 6-1 Representative Diesel fuel costs from western Alaska, 2001-20011 ($/gallon).

What economists refer to as the 'opportunity cost' of labor is another variable cost that may increase by triggered closure scenarios contained within Alternative 3. Measures that increase fishing time would reduce the time available for other activities and, in so doing, would impose a cost on fishermen. Several of the contemplated measures may increase the time required for fishing in affected fisheries. As noted elsewhere, avoiding non-Chinook salmon PSC may increase transit time to and from fishing grounds; fishermen may be forced to fish on grounds with lower CPUE, thus increasing the time required to harvest any given amount of fish; or they may force fishermen to learn new fishing grounds, thus increasing fishing time, at least initially. Because fishing crew members are generally paid with shares of an operation's net (or modified gross) revenues, the additional time spent at sea as a result of these measures may actually decrease crew earnings, if the operating expenses of the fishing vessel increase.

This opportunity cost is also reflected in lost time, which reduces the individual's opportunities to engage in other activities and is treated as a cost in economic benefit/cost analysis. The limitations of available models for predicting how fishing operations would behave, given the constraints, and the limited amount of cost information available for fishing operations, make it impossible to make quantitative estimates of

the change in fishing hours or days associated with these alternatives, or to make monetary estimates of the changes in associated opportunity costs.

Clearly, upon attainment of a hard cap, some portion of TAC would remain unharvested, representing forgone gross revenue; however, triggered closures may increase the cost of fishing per unit of the pollock that continue to be caught. Based on information provided by the industry at public meetings and through individual contacts, as well as the professional judgment of the preparers of this RIR, seven categories of costs were defined for consideration, as follows:

- Increased travel costs
- Costs of learning new grounds or using new or modified gear (e.g. excluder devices)
- Costs of PSC avoidance measures, or (if these efforts are unsuccessful) premature closure due to excessive PSC
- Reduced pollock CPUE due to less concentrated target stocks;
- Potential gear conflicts
- Effects on processors (floating or shoreside) built for higher throughput
- Safety impacts (addressed separately below in section 6.2)

Increased Travel Costs

Vessels that had formerly been able to fish areas nearer shore, and in relative proximity to their preferred port of operation, could be pushed farther offshore and/or into more remote fishing areas, as a result of specific provisions contained in Alternative 3. Running to the remaining open fishing areas, prospecting for harvestable concentrations of target species, then (depending on operating mode) running back to port with raw catch or product would, as previously noted, require increased expenditures of fuel and other consumable inputs, as well as more time on the water (i.e., trips may be longer, and all variable operating costs and wear and tear on equipment and crew would increase). These changes in fleet operating patterns would likely require a greater total number of days for a given vessel to take its share of the available TAC, other things being equal.

How many additional days may be required would vary by stock and ocean conditions, by rates of success in locating fishable concentrations of the target species in remaining open areas or time periods, by operational mode and capacity, by the level of aggregate effort exerted by the fleet or sub-sector in the remaining open areas, and by other factors. But clearly, if catch per unit effort declines, cost per unit of catch would increase. Smaller vessels may be so disadvantaged by the distances that must be traversed between port and open fishing grounds that they may be unable to operate economically (perhaps, even physically) under these circumstances. While the formation of the triggred closure areas specifically recognizes areas with high non-Chinook PSC but relatively low catches of pollock, implying little or no impact on CPUE from relocation of effort, it is still important to recognize that the limitations of a retrospective analysis absent behavioral feedbacks prevent one from saying definitively that vessels would be able to make up revenue at risk with little or no additional cost.

The smallest, least mobile vessels could be effectively closed out of some fisheries. Even vessels that have the capacity to reach open fishing grounds may incur prohibitively high operating costs (e.g., excessive fuel consumption), increased risk (e.g., should sea or weather conditions change unexpectedly), and reduced product quality (i.e., as hold-time increases). Longer distances and more time in transit mean higher operating costs and less time fishing.

Costs of Learning New Grounds or Using New Gear

It is axiomatic that fishermen fish when and where they believe the fish are most valuable and most readily available. Under the triggered closure area provisions, triggered closures would compel operators to alter the pattern of operations they would voluntarily choose to maximize profits. That is, in many

instances, fishermen would be required to fish on grounds with which they may be unfamiliar. Fishermen would face a learning curve on these new grounds. They would have to become accustomed to a new physical geography underwater and perhaps more extreme and/or exposed sea surface conditions, to new fish locations, behaviors, and habits, and, importantly, to new patterns of PSC.

While fishermen learn to operate within these new parameters, they would likely incur increased operating costs. Gear could be more frequently lost or damaged, and while it is not clear that CPUE would be lower PSC of other species could be higher. Higher PSC could force early closures of fishing grounds, and with fewer optional open areas available, it would be more difficult (and, thus, more costly) for operators to voluntarily move off hot spots to reduce or avoid PSC of both non-Chinook salmon and other prohibited species.

Costs of PSC Avoidance Measures

While, as a general rule in pollock trawl fishery, the selectivity of the gear fished varies, pollock fishermen unavoidably take other species as incidental catch when they fish for pollock. In some instances (e.g., PSCes of halibut, salmon, herring, and some species of crabs), pollock fishermen are subject to limitations on the amounts of PSC that they may take. When the PSC limits (or caps) are reached, the fishery is closed. Fishermen can, to a greater or lesser degree, reduce PSC by modifying their gear or the way they use it, and by learning the times and places when unacceptably large PSCes might take place (Queirolo et al. 1995). Both PSCes and the avoidance measures that they make necessary impose costs on the operations. Finally, with temporal and geographic dispersion provisions associated with the triggered closure alternative, there is the potential for increased interactions with protected species (e.g., short-tailed albatross, ESA-listed PNW Chinook salmon), which could require Section 7 consultation (with the potential to trigger further and more extensive fishing closures).

Reduced CPUE Due to Less Concentrated Target Stocks

The economic, operational, and socioeconomic response of individual operators may take several forms following adoption of a triggered closure. For example, anecdotal information supplied by the industry in public meetings and through individual contacts suggests that CPUE may decline, in some cases substantially, as a result of significant fishing effort being forced into unfamiliar or unfavorable areas. The effect of these declines would not likely be uniformly distributed across each management area, gear type, processing mode, or vessel size category and, thus, would carry with them very different implications for profitability, economic viability, and sustained participation in these fisheries.

Potential Gear Conflicts

Concerns have been expressed, from a variety of sources, about the adverse economic effects associated with forcing gear-specific effort out of traditional operating areas and into proximity with other gear groups and/or target fisheries. Trawl gear, pot gear, and longline gear are incompatible when fished simultaneously in a given area. Gear damage or loss is a common outcome when these competing fishing technologies come into contact with one another on the fishing grounds. Each gear group perceives itself as facing unique operating challenges with respect to such conflicts. For example, Pacific cod longline fisheries occur north of the Pribilof Islands at the same time that bottom trawl fisheries target flathead, yellowfin, and rock sole in the same area. By voluntarily isolating themselves in well defined and generally recognized areas, they insulate themselves from the high cost and frustration associated with gear conflicts (loss of longline gear and catch). If either a total pollock fishery closure and/or a triggered closure induced pollock vessels to switch, to the extent that sideboard regulations allow, to bottom trawl fishing on the flatfish fishing grounds gear conflicts could emerge. The likelihood of occurrence and magnitude of any such conflict is speculative at this time.

Effects on Processors Built for Higher Throughput

If CPUEs decline and fishing is more geographically dispersed under the triggered closure alternative, the aggregate rate of catch could slow. This implies that the rate of delivery to processors would also decline.

Because existing processing plant capacity has been built, in many cases, for peak through-put (i.e., to maximize the rate at which catch is received and processed in response to the race-for-fish on the grounds), lower and slower deliveries may not supply sufficient quantities of raw fish for the largest plants to operate profitably. Many plants have been designed, configured, and operated to exploit economies-of-scale in production. They are designed to move an optimal volume of fish through the processing plant at the most efficient, most cost effective rate, given the capacity of the facility and expectations of catch and delivery rates from the catcher-vessel fleet. If operated at rates that significantly deviate from those for which the plant was designed, these economies would be lost, and a plant could become unprofitable to operate.

The nature of these interactive and compounding relationships is important to keep in mind. None of these economic, operational, or logistical elements works in isolation from one another. Further, while many of these considerations have specifically been identified as being related to relocation of effort under a triggered closure alternative, they may also affect overall fleet operations under the threat of a hard cap induced total, and/or sector level, pollock fishery closure. Given the level of cooperation that exists within the pollock industry presently, and the fact that the VRHS ICA is a system conceived and implemented by industry (before Amendment 84 regulations took effect) for proactive PSC avoidance, it is not unreasonable to expect that the pollock industry may continue to operate the VRHS ICA, or some variant of it, in order to try to prevent attainment of a hard cap. As such, they would invoke various closures upon their membership that could have similar effects on operational costs as described above for Alternative 3. It follows that these cost impacts are presently being felt by the members of the ICA due to VRHS closures under the status quo and would also likely continue under the VRHS/80% closure option of Alternative 4.

6.2 Safety Impacts

Commercial fishing is a dangerous occupation. Lincoln and Conway, of the National Institute of Occupational Safety and Health (NIOSH), estimate that, from 1991 to 1998, the occupational fatality rate in commercial fishing off Alaska was 116 persons per 100,000 full time equivalent jobs, or about 26 times the national average of 4.4/100,000 (Lincoln and Conway 1999). Fatality rates were highest for the Bering Sea crab fisheries. Groundfish fishing fatality rates, at about 46/100,000, were the lowest of the major fisheries identified by Lincoln and Conway. Even this relatively lower rate was about ten times the national average (Lincoln and Conway 1999).

During most of the 1990s, commercial fishing appeared to become relatively safer. While annual vessel accident rates remained comparatively stable, annual fatality per incident rates (case fatality rates) dropped. The result was an apparent decline in the annual occupational fatality rate. From 1991 to 1994, the case fatality rate averaged 17.5 percent per year; from 1995 to 1998 the rate averaged 7.25 percent per year. Lincoln and Conway report that, “The reduction of deaths related to fishing since 1991 has been associated primarily with events that involve a vessel operating in any type of fishery other than crab” (Lincoln and Conway 1999, page 693). Lincoln and Conway described their view of the source of the improvement in the following quotation. “The impressive progress made during the 1990s, in reducing mortality from incidents related to fishing in Alaska, has occurred largely by reducing deaths after an event has occurred, primarily by keeping fishermen who have evacuated capsized (sic.) or sinking vessels afloat and warm (using immersion suits and life rafts), and by being able to locate them readily, through electronic position indicating radio beacons” (Lincoln and Conway 1999, page 694).

There could be many explanations for this improvement. Lincoln and Conway point to improvements in gear and training, flowing from provisions of the Commercial Fishing Industry Vessel Safety Act of 1988 that were implemented in the early 1990s. Other causes may be improvements in technology and in fisheries management. Technological improvements may include advances in Emergency Position

Indicating Radio Beacon (EPIRB, sometimes also called an ELT or Emergency Locator Beacon) technology. Current 406 MHz EPIRBs are more effective as a means of communicating distress than the 121.5 MHz EPIRBs in use in the early 1990s, in that they now transmit a unique identification code in addition to position information, which allows USCG personnel ashore to quickly identify the vessel, use point of contact telephone numbers, and more effectively filter out false alarms.

Fishery management changes have included the introduction of individual quotas for halibut and sablefish, actions that have dramatically slowed the historically frenetic pace of these fisheries. The introduction of co-ops in the pollock fisheries in 1999 and 2000 is not reflected in these statistics. Rationalization of the pollock fishery in the BSAI, however, may have furthered safety improvements. The Lincoln-Conway study implies that safety can be affected by management changes that affect the vulnerability of fishing boats, and thus the number of incidents, and by management changes that affect the case fatality rate. These may include changes that affect the speed of response by other vessels and the USCG. Starting in 1997, the Coast Guard's Seventeenth District instituted a practice of forward deploying a long range search helicopter to Cold Bay, Alaska, to improve agency response time during the Bristol Bay red king crab fishery. This practice was expanded in 1998 to cover the snow crab fishery. In 1999, approximately 11 lives were saved, in a 6-day period of extreme weather, when the forward deployed helicopter responded to several vessel sinkings and other marine casualties in short order.

In this RIR, several safety-related issues have been considered with respect to the alternatives. These include the following:

1. Fishing farther offshore,
2. Reduced profitability, and
3. Changes in risk.

Fishing Farther Offshore

Changes in fishery management regulations that result in vessels, particularly smaller vessels, operating farther offshore appear likely to increase the risk of property loss, injury to crew members, and loss of life. Non-Chinook salmon PSC minimization measures that close nearshore areas to fishing operations, such as the triggered closures of Alternative 3, could compel vessel operators to choose between assuming these increased risks or exiting these fisheries entirely. Weather and ocean conditions in the BSAI are among the most extreme in the world. The region is remote and sparsely populated, with relatively few developed ports. The commercial fisheries are conducted over vast geographic areas. While many vessels in these fisheries are large and technologically sophisticated, some are relatively small vessels with limited operational ranges.

Several factors associated with fishing farther from shore can reduce the safety of fishing operations by increasing the likelihood of emergency incidents. Vessels would probably have to spend more time at sea in order to take a given amount of fish. It would take more time to travel between port and the remaining open fishing grounds. Operators would also be likely to be fishing in less familiar conditions and on stocks that may be less highly aggregated, thus reducing CPUE. Increases in the time spent at sea increase the length of time fishermen are potentially exposed to accidents. Furthermore, longer trips are likely to increase fatigue and thus the potential for mistakes and accidents.

Other factors may tend to increase the case fatality rate. Fishing vessels may be farther from help if an accident occurs. In many cases, the initial response to trouble comes from other fishermen. If fishing farther offshore, on more extensive fishing grounds, increases the dispersion of the fishing fleet, assistance from other fishermen may not be as readily available. In addition, regulatory actions that force fishing vessels to work farther offshore may turn what would normally have been a request for assistance search and rescue case into an emergency or life threatening situation. Many search and rescue cases involving fatalities start as a casualty to the vessel that degrades its stability or survivability, but does not

immediately threaten the vessel or crew. After the initial casualty, other environmental factors (e.g., heavy seas, winds, freezing spray, etc.) may quickly cause the situation to deteriorate. The ability to render assistance early is essential. Vessels fishing farther from shore and/or in more remote and exposed locations may experience additional delays before help can arrive.

In a similar respect, the ability to satisfactorily treat personnel injuries is often determined by the speed with which the injured can receive adequate medical attention. While these factors may affect all operations, they are likely to be most serious for the smaller vessels based in Alaska ports, which have tended to fish relatively close to the shore in the past.

Reduced Profitability

As discussed throughout this RIR, proposed restrictions on fishing to minimize non-Chinook salmon PSC could reduce the profitability of many operations, especially including many of the smaller operations. Reduced profitability could be an indirect cause of higher accident rates. For example, fishermen facing a profit squeeze could defer needed maintenance on vessels and equipment, reduce operating costs by cutting back on safety expenditures, or scale back the size of their crew in order to reduce crew share expenses. Remaining crew would have expanded responsibilities and could risk greater fatigue, increasing the likelihood of accidents. Finally, these operators could decide to fish more aggressively, even in marginal conditions, in an effort to recoup lost revenues. These factors may affect the incident rate and the case fatality rate, as well.

Changes in Risk

Each of the factors described above increases risk. On the other hand, the potential for increased risk may be offset to some extent by changes in fleet behavior. An increase in risk effectively increases the cost of each additional day of fishing that, in turn, may contribute to reduced levels of participation (e.g., fewer fishing days) by smaller vessels. If this leads to a safety-induced reallocation of harvest from smaller to larger vessels, risk calculations may be affected. Similarly, smaller crew sizes mean that fewer people on a vessel are exposed to danger. Furthermore, skippers who have less invested in safety gear may have an incentive to behave more cautiously or conservatively in other respects in order to offset some of this perceived increased risk. Very little is known about factors that might increase risk, or that might offset risk increases, for fishermen in the North Pacific and Bering Sea. Even the best estimates of statistics as fundamental as the occupational fatality rate are not precise, and are not available at all for recent years. Rough estimates of the relative ranking of occupational fatality rates in different fisheries are known. Little more than qualitative speculation is available concerning the factors that affect the rates in the different fisheries, however. Available information does not permit quantitative modeling of changes in these rates in response to changes in fishery management regulations that could be induced by fishing impact minimization measures. These changes in fishing behavior and patterns could lead to an increased level of risk to vessels and crews, albeit an increase that cannot be empirically estimated.

Unfortunately, it is not possible to predict the changes in behavior that the industry might undertake to avoid non-Chinook salmon PSC and the effect on vessel, and human, safety. It is important to recognize; however, that the AFA pollock fishery is a rationalized fishery operating under a cooperative structure. A careful review of the alternative set reveals that the hard cap alternatives all contain provisions for cooperative level allocations, rollovers, and transfers. Thus, the alternative set includes measures to mitigate the possibility for a "race for fish" that could occur under unallocated PSC caps. These provisions also provide some mitigation of the associated impacts on vessel, and human, safety that might exist if a "race for fish" were created due to a PSC cap.

6.2.1 Pollock Product Quality, Markets, & Consumers

This section discusses the economic impacts of the alternatives on (1) product quality and revenue impacts, including changes in the time between harvest and delivery and changes in the average size of pollock, (2) costs to consumers, (3) impacts on related fisheries, and (4) impacts of fishery dependent communities.

This RIR is developed in compliance with Executive Order 12866, which specifies a cost-benefit analytical framework, either qualitatively or quantitatively where possible, and consideration of the implications for net national benefits. It is important to understand that the Office of Management and Budget has determined that effects on non-us citizens do not enter into the net national benefit calculation defined as the appropriate analytical metric in Executive Order 12866. Thus, implications on world markets, world food supply, and non-US consumers are not appropriate considerations in the analysis contained in the RIR.

6.2.2 Product Quality & Revenue Impacts

The non-Chinook salmon PSC minimization alternatives considered in lieu of the status quo may impose restrictions on pollock fishing vessel operations that might lead to a decline in product quality and associated reductions in the price the industry receives for fishery products. Changes in product quality may occur for at least three reasons:

- If a triggered closure occurs, CV operations may have to fish farther away from shoreside processors, requiring them to travel greater distances taking more time to deliver their catch;
- If forced out of the most productive grounds, either by a triggered spatial closure or a voluntary hot spot closure, fishermen may be induced to target stocks of sub-optimal sized fish;
- If a hard cap threatens a fishery closure, a race for fish may occur and catcher processors and motherships may change product mix in order to speed up production, thereby possibly reducing product quality and/or finished product value.

These potential effects on product quality would all be expected to lower the value of payments to CV operators as well as returns to shoreside processing value added.

The interval between catching and initiating processing pollock is, reportedly, negatively correlated with product quality (and, thus, value). Some reports suggest that, on a product-for-product basis, the quality of pollock harvested and processed at-sea is uniformly higher than that of product produced onshore, owing primarily to the significant difference in the interval of time between catching and processing. Inshore processors routinely place limits on the maximum holding time for pollock onboard catcher vessels, and deduct from the price or refuse delivery if the delivery time is exceeded. For those vessels that do not have the capability to process their own catch, given a fixed catch rate and hold capacity, any action that substantially increases the time between catch and delivery imposes costs, both on the harvester and the processor. Beyond some point (which varies by vessel size, configuration, condition of the target fish, and weather/sea conditions) delivery of a usable catch (i.e., one with an economic value to the fisherman and processor) is not feasible.

In this latter connection, a concern common to all operators delivering catch ashore for processing is the effective time limit that exists from ‘first catch onboard’ until offloading to deliver a salable catch. Informed sources in the industry place the maximum interval at 72 hours (at least in the case of pollock). If fishing grounds that remain open under one or another of the fishing impact minimization alternatives are more remote from sites of inshore processing facilities than the traditional fishing locations, the delivery time for the raw product by the catcher vessel may be lengthened and the value of the delivered

product lowered. For smaller vessels with more limited holding capacity and slower running speeds, this limit would impose relatively greater constraints (i.e., operational burdens). The result may be an effective intra-sectoral redistribution of catch share.

Closures (or other operational restrictions) of fishing grounds adjacent to inshore processing facilities may inadvertently redistribute the catch within a sub-sector, from the smaller, least operationally mobile vessels to the larger, faster, more seaworthy elements of the fleet. In the long run, this may have the added and undesirable effect of inducing further 'capital stuffing' behavior within the industry as those disadvantaged small boat owners perceive the need to invest in added capacity to continue to participate profitably in the fishery.

A corollary effect of altering the timing and/or location of catch might accrue if the average size of fish in the catch falls below the minimum requirement for specific product forms. These minimums are often dictated by the marketplace, but may also be directly linked to the technical limits of the available processing technology. These impacts could accrue to any or all segments of the fishery. For example, on average, fillet production requires a larger pollock than does, say, surimi production. If spatial displacement (e.g. via a triggered area closure) results in a significant decline in the average size of fish harvested by a given operation, there could be adverse effects on product mix, quality, grade, and value.

In contrast to potential declines in product value that could occur, there may be upward price pressure due to reduced quantity of pollock supplied to markets if a PSC management measure results in forgone pollock catch. The economic law of demand (e.g., a downward sloping demand curve) suggests that (assuming all other factors are held constant), if fewer units of a normal good or service are supplied, the individual unit price would be expected to rise. This means that, within the limits of this model and the context of this action, if fewer fish of a given species are harvested, then fishermen should receive more for each unit of that species they continue to catch and deliver to the market, all else being equal. Any increase in price that would actually occur would depend on, among other things, how responsive the price consumers are willing to pay is to changes in the quantity of catch supplied. The consumers' willingness to pay more for these products is dependent upon how unique the products are, that is, whether the consumer can substitute a lower cost alternative product. There is evidence to support the idea that reduced pollock production would tend to push prices up. The prices shown in this analysis reveal an upward trend in the past several years as pollock TACs have declined from roughly 1.4 million metric tons to approximately 800,000 metric tons. However, very little empirical information is available at this time concerning the responsiveness of price to quantity supplied for the species and product forms potentially affected by the alternatives over the range of possible quantity change that might be anticipated.

To the extent that these pollock fishery products are consumed in the United States, any producer benefit accruing from a price response to diminished supply would be, to a very large extent, offset by a reduction in consumer welfare from the increase in price. That is, the benefit to the industry would simply be the result of a transfer from consumers. Thus, under these conditions, this hypothesized supply-induced price increase would create no net benefits to Americans that could be revealed in a cost-benefit analysis for domestically consumed fish. Quantity changes under some alternatives under consideration in this action may be small enough to have no perceptible impact on prices, while under other alternatives they may. It is not possible, at this time, to estimate the likelihood or magnitude of these hypothetical supply and price effects.

Alternatively, to the extent that these fish are exported and consumed outside of the United States, any supply-induced price increase would create an attributable net benefit improvement to the Nation, from a cost/benefit perspective. This is because the price increase would accrue, in the form of increased gross revenues, to United States producers, while the loss in consumer welfare would be imposed on citizens of

other countries. Under OMB guidelines, costs incurred by (and, for that matter, benefits accruing to) foreign producers and consumers are excluded from the net benefit analysis performed in a Regulatory Impact Analysis. Such changes would (all else equal) have no effect on net benefits to the nation.

6.2.3 Costs to Consumers

Ultimately, fish are harvested, processed, and delivered to market because consumers place a value on the fish that is over and above what they have to pay to buy them. A person who buys something would often have been willing to pay more than they actually did for the good. The difference between what they would have been willing to pay and what they had to pay is treated, by economists, as an approximation of the value of the good or service to consumers (i.e., consumer's surplus) and as one component of its social value. If the price of the good rises, the size of this benefit will be reduced, all else equal. If the amount of the good available for consumption is reduced, the size of this benefit is also reduced. Provisions of the proposed non-Chinook salmon PSC minimization actions could reduce the value consumers of seafood (and associated fish products) receive from the fisheries for several reasons, including 1) consumers may be supplied fewer fish products; 2) consumers may have to pay a higher price for the products they do consume; and 3) the quality of fish supplied by the fishing industry may be reduced and, thus, the value consumers place on (and receive from) them will decline.

The domestic consumer losses would fall into two parts. One part, corresponding to the loss of benefits from fish products that are no longer produced, would be a total loss to society. This is often referred to as a deadweight loss. The second part, corresponding to a reduction in consumer benefits because consumers have to pay higher prices for the fish they continue to buy, would be offset by a corresponding increase in revenues to industry (i.e., producers' surplus gains). While a loss to consumers, this is not a loss to society. It is a measure of the benefit that consumers used to enjoy, but that now accrues to industry in the form of increased prices and additional revenues.

The actual loss to society cannot be measured with current information about the fisheries. Estimation would require better empirical information about domestic consumption of the different fish species and products, and information about the responsiveness of consumers to the reduction in the supply (e.g., their willingness and ability to substitute other available sources of protein). In addition in the present case, because, under the status quo, society is already in a suboptimal state (i.e., incurring a welfare loss associated with the economic negative externalities imposed by salmon PSC), actions taken to reduce these externality impacts (i.e., minimizing pollock trawl fishing impacts on salmon) will result in an aggregate welfare improvement to society, offsetting any apparent welfare reduction in the retail/wholesale domestic seafood/fish products commercial marketplace (i.e., no deadweight loss is incurred).

6.2.4 Impacts on Related Fisheries

Direct changes to a fishery, induced by non-Chinook salmon PSC minimization measures, could have indirect and unanticipated impacts on other fisheries beyond the gear conflict issue addressed earlier. Some of these impacts could impose (perhaps substantial) costs on these other fisheries. The following costs have been considered in this RIR:

- Displacing capacity and effort,
- Compression/overlapping of fishing season, and
- Increased costs of gearing up and standing down.

Displacing Capacity and Effort: While AFA sideboard provisions and license limitation program constraints seek to manage and control transfer of effort and capacity across fisheries, they are not absolute barriers to this phenomenon. Should salmon PSC minimization measures become too constraining to support existing levels of effort, it is possible that effectively displaced capacity would

redistribute to remaining open target fisheries within the limits imposed by AFA sideboards, imposing potentially increased costs on the operations that currently prosecute them.

Compression/Overlapping of Fishing Season: Many of the larger operations in the Bering Sea pollock fishery are highly specialized (e.g., AFA surimi C/Ps). Many others, however, rely upon diversification (i.e., fishing a sequential series of different target fisheries over the course of the year) to sustain an economically viable operation. Communities have developed around, and invested in facilities and infrastructure to support, these fishery participation patterns. The classic Alaska example has come to be the 58-foot Limit Seiner. This class of commercial fishing vessel was specifically designed to meet the State of Alaska's regulatory limit (i.e., maximum 58 feet LOA) for participation in the salmon seine fishery. Over time, these, as well as many other, small boats have evolved patterns of operation that include participation in fisheries for (among others) crab, halibut, and various combinations of groundfish species.

Because these operations are economically dependent on participation in a suite of fisheries, anything that alters their ability to move sequentially from fishery opening to fishery opening places them at economic risk. For example, should the Council select a non-Chinook salmon PSC minimization action that results in temporal displacement of fisheries (either directly or indirectly), placing fishery openings in conflict, it could reduce the economic viability of some fishing operations. They could find themselves in the position of choosing to participate in only one fishery, among two or more alternative openings, and foregoing participation in the others. It may not be possible, under these circumstances, for such an operation to remain economically viable in the long run. Besides losing the revenues from participation in fisheries that overlap, these operations could find themselves idled during portions of the year when weather and sea conditions would otherwise permit fishing operations. This could have unintended consequences, such as difficulty retaining a professional crew and smaller gross revenues over which to spread fixed costs. It could also mean lost wages to the community.

There could be an analogous concern about the inshore processing sector. Processing plants often are equally dependent on the predictable sequential prosecution of fisheries during their operating year. Many plants in Alaska are specifically designed and configured to take advantage of efficiencies attributable to a consistent seasonal sequence of species delivered for processing. Crews are hired, maintained, or let go, as needed, based on expected demand for processing services. Likewise, start-up, maintenance, and shut-down costs are predicated on the timing and duration of fishery openings, as are logistical and staging costs to assure production inputs are in place when needed, and outputs reach markets on time.

In the worst case scenarios considered in this RIR, owners of processing capacity could be forced to consider not opening their plants because of uncertainty about the timing and duration of fisheries. If some plants fail to open on schedule, fishermen who otherwise would have participated in a fishery may have no market for their catch. This may be particularly significant for small catcher boats operating in relatively remote areas of the state. Furthermore, these effects need not necessarily accrue only to operators in the pollock fishery. In some areas, processors are able to provide markets for, say, salmon, only because they can underwrite some of their fixed staging costs by keeping their operations employed over an extended season with deliveries of crab, halibut, groundfish, etc. The extent to which these potential adverse effects are actually realized cannot be assessed at this time. Nonetheless, they represent potentially significant sources of economic disruption for these sectors of the industry, and the coastal communities dependent upon them.

Increased Costs of Gearing Up and Standing Down: Logistical and staging costs can represent a significant expense for many operations participating in the fisheries of the Bering Sea. Should one or more of the non-Chinook salmon PSC minimization measures result in temporal displacement of fisheries

there would be adverse economic and operational impacts on vessels, plants, and crews that could not be readily avoided or compensated for. That is, if a salmon PSC minimization measure results in, for example, an early fishery shutdown due to attainment of a hard cap, the immediate result would be an idling of the fleet and associated processing plant capacity. In effect, the fishery would be required to stand-down until the next scheduled seasonal opening. From the perspective of the fishing industry, mandatory idle periods between openings impose direct costs. The longer the duration of imposed idleness and the more numerous these periods, the greater the potential economic and operational burden.

Presumably, there exists some form of a step function that characterizes these potential adverse impacts. That is, it may be likely that a mandatory stand-down of 24 hours, or 48 hours, or even 72 hours, would impose costs that could be absorbed by most operators participating in the target fishery (although all would likely prefer to avoid them). Indeed, over such a relatively brief interval, an operator might keep the crew productively employed with maintenance and/or other forms of preparation for the anticipated re-opening. Nonetheless, the plant or vessel must continue to pay its variable costs (e.g., wages and salaries, food and housing expenses, fuel and other consumable input costs, etc.) during the stand-down while producing no marketable output, and therefore earning no revenues.

Under such circumstances, each operator could eventually reach a threshold, beyond which the cost of standing-by would become a significant economic burden. Precisely where this threshold lies would likely vary by operation. At present, no empirical information is available with which to predict when these thresholds might be attained by any given plant or vessel. However, if the threshold were reached, the operator would face a series of decisions with potentially significant economic costs and operational consequences.

These costs may be characterized as staging expenses. For example, transporting crews by air to and from remote Alaska locations multiple times in a fishing year (rather than once or twice, as has historically been required) would represent a significant additional operating expense. In association with analysis of the Bering Sea Pollock/Steller RPA analysis undertaken in late 1999 and early 2000, the At-sea Processors Association reported that each C/P that participates in the pollock target fishery carries a crew of 100 to 125. Motherships and inshore plants in that same fishery have at least as many transient employees. Repeated movement of crew to and from staging areas in remote Alaska ports in response to stand-down periods, on the scale suggested by these estimates, would represent a potentially significant economic and logistical burden for these fleets and plants.

Similarly, moving fishing supplies and support materials to and from the vessel's staging port or onshore plant location two or more times each season, as well as providing for secure stand-down status of the vessel or plant and its equipment between openings, could impose considerably higher operating costs, and thus smaller profit margins. Moorage slips, especially for the larger vessels in these fleets, may be in short supply, given the limited physical facilities that currently exist in ports and harbors. If entire fleets must lay-up for weeks or even longer periods between openings, existing moorage facilities could be overwhelmed. Even if adequate space could be found, it is probable that rental/leasing costs for that space would be bid up significantly. In the long run, this induced demand could result in investment in additional port and harbor facilities.

As suggested above, inshore processors may experience equivalent logistical costs, depending upon their relative level of operational diversification, geographic location, length of current operating season, etc. Presumably, there exists a balance-point between the minimum necessary volume of deliveries of catch to a plant, the duration of idleness between delivery flows, and the ability to operate a processing facility at all. While likely varying from plant to plant, operator to operator, and even species to species delivered, it is clear that if a plant cannot cover its variable operating costs, it is better off (from an economic perspective) to cease operation altogether. As staging costs (e.g., moving crews and supplies to and from

the facility) increase, this operating margin shrinks. Data limitations preclude estimating which plants can or would choose to operate under these circumstances. It is apparent, however, that significant temporal changes in fishery openings and/or duration (as implicitly or explicitly provided for under several of the proposed alternatives) would increase the likelihood that some may not continue to operate.

6.3 The Voluntary Rolling Hotspot System Under Alternative 1: Status Quo

An examination and analysis of the effectiveness of the volungtary rolling hotspot system, under the status quo, has been conducted by Dr. Alan Haynie, of the Alaska Fisheries Science Center. The analysis, in its entirety, is contained in section 5.3 of the accompanying EA. This analysis, which spans approximately 40 pages in section 5.3, is the most comprehensive treatement of the efficacy of the VRHS conducted to date. While all of the analysis is highly pertinent in the evaluation of the status quo, and in comparing the potential effects of Alternatives 2 and 3 with the status quo, the analysts have chosen to limit the treatment here to the summary of findings of that analysis rather than reprinting all 40 pages. It should be understood; however, that the full treatment of that analysis is applicable here and is hereby incorporated both by the association of the EA and RIR as accompanying documents and by reference!

Summary of Findings on Status Quo Chum PSC-reduction measures
Collectively, the Chinook and non-Chinook salmon PSC measures implemented through the VRHS system and Amendment 91 arguably represent the most extensive PSC reduction efforts that have ever been undertaken. Given the importance of the VRHS in the status quo as well as a component of the action alternatives, an extensive analysis of the efficacy of this system has been developed and is presented in Chapter 5 section 3 of the accompanying EA. What is presented here is a synopsis of the findings of that analysis.

Key findings of this analysis include:

- From 2003-2010, comparing chum PSC rates in the 1-3 days following RHS closures are approximately 8 percent lower
- Annual average chum PSC in the 5-days before closures were imposed from 2003-2010 ranged from 11-33 percent for CVs and from 2-30 percent for other sectors, with the majority of years being in the upper end of this range. The average percentage of pollock range from 7-21 percent for CVs and was less than 5 percent for other sectors.
- Evaluating the 1993-2000, an RHS-like system would likely have reduced chum PSC by 9-22 percent on average with about 4-10% percent of pollock fishing have been relocated to other areas.
- The pre-RHS analysis suggest that often ‘what’s good for chum is good for Chinook’ with the range of Chinook savings as 6-14 percent per year.

- Based on 1993-2000 data, large closures reduce salmon PSC more but at the cost of moving additional pollock. Also, closures based on the most recent information possible leads to larger average reductions and relatively small base rates appear on average to be more effective.
- The current “tier system” of the RHS program allows cooperatives with low PSC relative to the base rate to fish inside closed areas. This provides some incentive for cooperatives to have lower chum PSC rates in order to be able to fish in closed areas, though these vessels often choose to fish elsewhere. During closure periods, 4.6 percent of CV pollock and 0.3 percent of pollock by the other sectors was taken inside the closure areas.
- An examination of the chum PSC rates in the chum Salmon Savings Area (SSA) indicates that in over 90 percent of months from 2003-2010, chum PSC rates were *lower* in the Chum SSA than outside of it, suggesting that trigger this area could be actually increase chum PSC.

- In 2011, chum RHS closures were in place throughout the B season, whereas in previous years Chinook closures were explicitly given regulatory priority.

Compared to alternative spatial management systems, the RHS system has advantages and limitations. Key advantages of the hotspot system relative to fixed closures include:

- Sea State has shown the ability to make trade-offs between chum and Chinook PSC and to consider how vessels will respond.
- Adjustments to what areas will be closed can be made regularly in response to the substantial inter-annual variability in the quantity and concentration of PSC. This prevents the possibility that fixed closures would consistently force vessels from low-PSC areas, which is a possibility with any system that cannot adjust.
- Anecdotal information from vessel operators and plant managers can be combined with observer data, VMS data, and knowledge of how seasonal PSC conditions evolve to make well-informed predictions of where salmon PSC will occur in the near-term.
- The system can adapt with new information. For example, from the 8/27/07 SeaState report – "It would be particularly useful to know if there is a temperature front associated with higher or lower PSC, as there was further up on the shelf."
- Through regular reporting to the Council and independent audits of potential violations, there is transparency in whether vessels adhere to closures. The number of violations of the closures has been very limited and seemingly generally due to honest mistakes by vessel operators.

The Council's June 2010 motion requested an analysis of potential means to modify the chum rolling hotspot system. Options for adjusting the system include:

- Modifications of the RHS program to the vessel-level would follow the current shoreside and catcher-processor Chinook RHS programs. An individual-level system would increase the likelihood that vessels face consequences for high PSC. Because there may also be some advantages to having cooperative-level incentives, a RHS system could also include *both* individual and cooperative-level incentives.
- Sea State strives to have recent information available for deciding which areas to close. There is no easy technical fix to reduce the utilization of information. Shortening the approximately 24-hour delay between when closures are announced and implemented would improve the quality of data and could provide some additional incentive to avoid high-PSC areas immediately before closures are implemented. However, this would occur at additional cost to the fleet and historical simulation results suggest that the reduction in PSC would be relatively small.
- The RHS could be adjusted to focus on benefits to Western Alaska stocks by being more active early in the B season. However, if extremely large closures are imposed in this period so that fishing is slowed down significantly, it could have the unintended consequence of pushing a larger amount of fishing effort into October, when Chinook PSC is usually highest.
- Historical simulation results indicate that larger closures are likely to further reduce PSC, but at a decreasing rate as they get larger. Larger areas at high-PSC periods would allow more high-PSC areas to be closed.
- When PSC rates change quickly, the current 3-week moving basis for determining the base rate means that all cooperatives or few cooperatives are subject to closures. The base rate could be based on the most recent behavior to ensure that vessels or cooperatives with relatively high PSC rates in the most recent period would be subject to closures.
- Modifying the incentives associated with the tier system has the potential to significantly strengthen the effectiveness of the RHS system. Larger and longer closures or any other reward and penalty could be incorporated into the tier system. If a more stringent chum RHS is developed,

vessels could be made exempt from some of the closures if they have relatively low *Chinook* PSC, further increasing the incentive to avoid Chinook PSC as well.

In balancing the chum and Chinook PSC, the RHS system has demonstrated the ability to carefully balance the trade-offs in a manner that could not be done with fixed closures. The program has continued to evolve and learn from new challenges.

6.4 Pollock Fishery Gross Revenue under Alternative 1: Status Quo

The analysis of potential effects on pollock industry revenue uses a retrospective analysis of fishery conditions during the 2003 through 2011 seasons. Constraints, in the form of fishery closures, are applied in each year, by season and sectors. Thus, the constraints are applied to calculate potentially forgone gross revenue as that portion of revenue that was actually earned, as reported by industry, up to the date of the closure. The actual total first wholesale gross revenue values that the industry earned during the 2003-2011 time-frame (i.e. under Alternative 1, the status quo) are presented below. Their use in calculating prices used in the impact analysis is detailed in the next section.

Table 6-1 A and B Season total (Annual) Round weight equivalent nominal first wholesale gross value of retained pollock by sector 2003–2011.

YEAR	A and B Season Annual Total First Wholesale Gross Value			Total Annual First Wholesale Value
	CDQ	CP/M	Shoreside	
2003	$103	$468	$456	$1,026
2004	$116	$520	$446	$1,082
2005	$131	$597	$536	$1,264
2006	$133	$597	$517	$1,247
2007	$139	$602	$500	$1,241
2008	$145	$647	$540	$1,331
2009	$109	$472	$446	$1,027
2010	$106	$491	$438	$1,035
2011**	$139	$660	$612	$1,410

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2008 and 2010.

*Estimated using pollock catch by season and sector, from catch accounting, and applying the 2010 price per round metric ton as a price proxy.

Harvest tonnages were valued using annual round weight equivalent first wholesale prices derived from the catch accounting system (Hiatt 2011). The first wholesale prices were estimated by dividing the total wholesale value of pollock production by estimated retained tons of pollock, to yield a round weight per ton of catch equivalent value. First wholesale prices are the prices received by the first level of inshore processors, or by catcher-processors and motherships. They reflect the value added by the initial processor of the raw catch. They are not, therefore, equivalent to ex-vessel prices. The first wholesale values by species group, fishing gear, and area for the catcher-processor fleet used in this analysis are summarized in the tables below.

6.5 Calculation of Potentially Forgone Pollock Revenue and Pollock Revenue at Risk

The analysis of potential forgone gross revenue has used the estimated date on which the pollock fishery would have hit the various non-Chinook salmon PSC caps in each of the years 2003-2011 in order to conduct a retrospective analysis to answer the question of what would have happened had the proposed action been in place in those years. The estimate of potentially forgone pollock harvest that results is then multiplied by a price to estimate potentially forgone gross revenue. Since the impact estimate is calculated in terms of the metric tons of pollock catch potentially forgone, it is necessary to use a price that is reflective of the total value of that catch. This process is necessarily complicated by the fact that pollock is processed into several product forms and is processed both at sea (on CPs and Motherships) and in shoreside processing facilities that receive deliveries from Catcher Vessels. Thus, reported values in the offshore sector (CPs and Motherships) are inclusive of all processing value added to the first wholesale level, which is also the point of departure for export of pollock products. Effects in export markets are not an appropriate consideration in a RIR. Thus, this is a logical level at which to value potential impacts because exports and effects on export markets lie outside this level of valuation. Further, potential welfare impacts in domestic markets cannot be determined with available data. Thus, first wholesale value is an appropriate value by which to capture the total quantifiable domestic market effect on potential forgone pollock harvest and revenue.

The analysis is complicated by the fact that deliveries to shoreside plants by Catcher Vessels are paid an ex-vessel price that is considerably less than, and thus not comparable to, the first wholesale value. To provide comparable first wholesale values for both the offshore and inshore sectors, the analysis does not use ex-vessel value and, instead, calculates a shoreside sector price that is inclusive of all processed value added. This is done by annually aggregating the total value of all pollock products processed by shoreside processors, as reported by industry to NMFS in the COAR report and compiled by the Alaska Fisheries Science Center, and dividing that value by the total round weight of retained metric tons of pollock harvested by Catcher Vessels in the Bering Sea pollock fishery as reported in the e-landings catch accounting system.

This calculation provides a round weight equivalent first wholesale value for the shoreside sector that can be multiplied by estimates of potentially forgone pollock harvest, in round metric tons, to determine potentially forgone gross revenue at the first wholesale level. This is done annually from 2003 through 2011 in the RIR for each of the sectors and these prices are reported in Table 6-2 and Table 6-3. These are the prices that are applied by year for each year from 2003 through 2011.

Table 6-2 B Season Round weight equivalent nominal first wholesale value of retained pollock by sector, 2003-2011 ($/mt).

YEAR	Round Weight Equivalent First Wholesale Value/mt		
	CDQ	CP/M	Shoreside
2003	$537.68	$540.30	$632.96
2004	$564.94	$559.48	$595.94
2005	$687.96	$712.30	$700.32
2006	$704.51	$713.41	$697.62
2007	$834.10	$818.19	$762.63
2008	$1,232.55	$1,248.65	$1,113.88
2009	$1,153.11	$1,122.08	$1,189.18
2010	$1,185.42	$1,236.22	$1,178.04
2011*	$1,185.42	$1,236.22	$1,178.04

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 20109. * 2010 price is used to proxy 2011 prices.

Table 6-3 B Season nominal first wholesale value of retained pollock by sector 2003–2011.

YEAR	B Season First Wholesale Gross Value			Total B Season First Wholesale Value
	CDQ	CP/M	Shoreside	
2003	$49	$218	$249	$515
2004	$51	$221	$225	$498
2005	$63	$283	$274	$619
2006	$64	$288	$268	$620
2007	$70	$303	$251	$624
2008	$75	$337	$283	$695
2009	$57	$248	$249	$554
2010	$59	$278	$249	$585
2011**	$60	$390	$353	$803

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2010.

** Estimated using pollock catch by season and sector, from catch accounting, and applying the 2010 price per round metric ton as a price proxy.

The analysis of revenue impacts of the alternatives on the pollock industry was conducted in terms of two gross revenue categories. The first is the potential forgone gross revenues that could have been generated under various non-Chinook salmon PSC hard caps contained within Alternative 2. This is simply the gross revenue that would have been generated by the pollock TACs, and their allocations among sectors, that have historically been caught after the projected closure date under the hard cap scenarios. These differ between the alternatives depending upon the sector, cap amount, seasonal split options, and historic allocation options.

The second general category is gross revenues at risk under the triggered closure area options contained in Alternative 3. The affected fishing fleets may or may not have been able to make up the displaced catch and the gross revenues that would have been lost because of these restrictions, by fishing outside of the closure area. Because some sectors may potentially have been able to recover some or all of these gross revenues, the gross income from these catches cannot, strictly speaking, be described as lost. Instead, they have been described here as "at risk."

Only if it is assumed that harvest foreclosed to a fleet sector in one area by Alternative 3 could not have been made up elsewhere by that fleet sector would at-risk gross revenues be an estimate of lost gross revenues. Accurate estimates of the abilities of fleets to make up a reduction in harvests in one area, due to closures under Alternative 3, by fishing in another require information on the following: (1) the volume of catch (and resulting production) affected by the Alternative 3 closure areas, (2) the extent to which each fleet sector would have redirected its operations into other fishing areas, and (3) the comparative productivity of the fleet sectors in the new areas. Currently, it is possible to quantitatively estimate only the first of these, (i.e., the volume of catch coming from areas that would no longer have been available to fishermen under each triggered closure scenario contained within Alternative 3.

As noted above, gross revenues at risk are forgone **only** if a fishing fleet is unable to modify its operation to accommodate the imposed limits and, thus, cannot make up displaced catches elsewhere (either in remaining open fishing areas or during alternative open fishing periods). Having estimated the maximum gross revenues that might be lost to each sector, on the assumption that the fleet is unable to make up the affected harvests, it is possible to incrementally relax this assumption and assess the effects. If one assumes that the underlying behavioral model is linear in its parameters, evaluating an alternative assumption about the total forgone catch is straightforward. For example, if one assumes that a given sector is able to make up 10 percent of the harvest elsewhere, the estimated at risk gross revenue impact would be multiplied by 0.90; if the assumption is that, say, 20 percent is made up elsewhere, the total is multiplied by a factor of 0.80, and so forth. This is done without specifying where (or when) the sector might operate, or at what cost. With total gross revenue at risk information available for each fleet segment, the reader may apply his or her own assumptions about the extent to which each fleet segment would be able to make up its catch elsewhere, thus producing his or her own estimates of the gross revenues that might be forgone.

6.6 Potentially Forgone Gross Revenue and "Revenue at Risk" under Alternative 2

Under the non-Chinook salmon PSC hard cap scenarios included in Alternative 2, option 1a, the pollock trawl fishery, and/or specific sectors that participate in it (depending on apportionments of hard caps) would be required to stop fishing once a specific hard cap is reached. In such a circumstance, any remaining TAC that is not harvested when the cap is reached would remain unharvested unless specific provisions of the hard cap alternative dealing with transfers, rollovers, and/or cooperative level management are applied. These may in mitigate potential losses in revenue due to unharvested pollock TAC.

While the hard cap option of Alternative 2 has the potential effect of fishery closure and resulting forgone pollock fishery revenue, option 1b would close the fishery in June and July and reopen it in August. The fleet would be required to stand down during this closure and would, presumably, then return to the grounds and attempt to harvest all remaining pollock allocation in the remainder of the B season. Thus, option 1b is essentially a triggered closure of the Bering Sea pollock fishery that puts the gross revenue earned historically in June and July at risk of not being realized. The revenue associated historically with June and July harvests is placed at risk of not being earned if the fishing post closure is not sufficiently productive to offset any operational costs increases, opportunity costs associated with switching to

another fishery (e.g. Pacific whitting) , associated with relative harvesting inefficiencies post closure, and provided that the fleet feels that is able to sufficiently avoid Chinook salmon PSC late in the B season such that Chinook PSC will not affect future constraints on the pollock fishery under the Chinook salmon PSC management measures of Amendment 91. The previous discussion contained in the overview of costs and benefits provides a treatment of some of the implications and limitations of this "revenue at risk" analysis.

This section specifically details the impacts on gross revenue and gross revenue put at risk via an unmitigated closure of the pollock fishery, or sectors within it, due to hard caps under option 1a. This analysis provides hypothetical estimates of potentially forgone pollock first wholesale gross revenue by year and season under non-Chinook PSC option for fleet wide caps, and for the CDQ fishery and non-CDQ fishery. Also provided are estimates of revenue put at risk, with similar sector level breakouts, by option 1b of Alternative 2.

Table 6-4 provides hypothetical estimates of potentially forgone pollock first wholesale gross revenue, by year and season, under the options for fleet wide caps, and for the CDQ fishery and the non-CDQ fishery. As expected, the greatest adverse economic impact would have occurred in the highest PSC year (2005) and under the most restrictive PSC cap of 50,000 non-Chinook salmon where scenario 1 estimates are approximately $482 million would potentially have been forgone. That gross value is composed of $209 million from the CV sector, $202 million from the CP sector, $53million from the Mothership sector, and $18 million from CDQ pollock fisheries.

As is expected, the greatest adverse economic impact on the pollock fishery would have occurred in the highest PSC years (2005 and 2011) and under the most restrictive PSC cap of 50,000 non-Chinook salmon where Alternative 2 Option 1a is estimated to result in approximately $482 million and $519 million in potentially forgone gross revenue in 2005 and 2011, respectively. The 2005 potentially forgone gross value is composed of $209 million from the CV sector, $202 million from the CP sector, $53 million from the Mothership sector, and $18 million from CDQ pollock fisheries. The 2011 potentially forgone gross value is composed of $222 million from the CV sector, $253 million from the CP sector, $78 million from the Mothership sector, and $25 million from CDQ pollock fisheries.

As is expected, as the hard cap amount increases, the adverse economic impacts on the pollock fisheries decrease, all else being equal. As the hard cap level is increased to 200,000 fish the potentially forgone revenue estimates are, as expected, lower and the hard cap is a binding constraint in fewer years. What is also apparent is that as the cap in increased the potentially forgone revenue accrues mostly, and in some cases only, in the CV sector. As the hard cap level is increased to 353,000 fish, and the allocation scenarios go from 2ii to 4ii and to 6, the potentially forgone revenue estimates continue to decline relative to the two lower caps and the impacts accrue exclusively in the CV sector (353,000 cap, allocation 3), and As is the case of the 200,000 fish cap, this is simply a function of the CV sector having the highest proportion of non-Chinook PSC of all sectors.

The effect of Alternative 2, option 1b (June and July closure option), in the highest PSC years (2005 and 2011) and under the most restrictive PSC cap of 50,000 non-Chinook salmon is estimated to be approximately $191 million and $330 million in gross revenue at risk in 2005 and 2011, respectively. That gross value is composed of $83 million from the CV sector, $81 million from the CP sector, and $27 million from the Mothership sector. The 2011 revenue at risk is composed of $163 million from the CV sector, $106 million from the CP sector, $37 million from the Mothership sector, and $24 million from the CDQ pollock fisheries. The changes in impacts as the cap increases and the allocation is changed are similar to those identified for option 1a; however, option 1b results in considerably reduced potential impacts on the pollock fishery when compared to option 1a.

Table 6-4 Alternative 2, Option 1a: Estimated hypothetical forgone pollock nominal gross revenue ($ millions) in the B season by sector and year under three different allocation schemes and hard caps, 2003-2011.

2ii (sector allocation 1)															
Cap:	**50,000**					**200,000**					**353,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$27	$36	$24	$123	$211	$7		$7		$13					
2004	$42	$170	$35	$119	$366	$16	$124	$5	$53	$199		$74		$22	$96
2005	$18	$202	$53	$209	$482	$7	$75	$19	$179	$279		$57	$5	$141	$203
2006		$160		$251	$412				$168	$168					
2007	$15	$98	$25	$62	$200										
2008															
2009															
2010															
2011	$25	$253	$78	$222	$577		$115	$63		$178		$13	$26		$39
4ii (sector allocation 2)															
Cap:	**50,000**					**200,000**					**353,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$18	$18	$15	$139	$191				$18	$18					
2004	$29	$162	$28	$122	$342		$74	$0	$57	$131				$40	$40
2005	$15	$91	$49	$213	$367		$46	$9	$185	$240				$167	$167
2006		$67		$251	$318				$203	$203				$141	$141
2007	$13	$68	$19	$79	$178										
2008															
2009				$16	$16										
2010															
2011	$3	$187	$75	$254	$519			$34		$34			$9		$9
6 (sector allocation 3)															
Cap:	**50,000**					**200,000**					**353,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$7	$3	$11	$157	$178				$44	$44					
2004	$19	$148	$21	$135	$322		$11		$91	$101				$53	$53
2005	$14	$80	$47	$225	$366				$204	$204				$179	$179
2006				$261	$261				$229	$229				$170	$170
2007	$5	$51	$11	$91	$158										
2008															
2009				$77	$77										
2010															
2011		$161	$75	$286	$522			$21	$72	$94					

The following tables provide the data, discussed above, by sector (CDQ, CP, CV, and motherships) as a percent of B season total gross revenue and then as a percent of annual total revenue. What is immediately obvious is that potentially forgone revenue in the CV sector can represent nearly 94% of B season total revenue in the worst case under the 50,000 fish cap. Also evident it that CPs can also have as much as 77% and the CDQ sector as much as 81% of their B season revenue placed at risk under the lowest cap, while motherships have relatively lower percentages of less than 20 percent of B season revenue placed at risk. As is the case with revenue estimates, percent of revenue show increasing impacts to CVs, under the scenario 2 and 3, with reductions is other sectors, while the effect of increasing the cap is to concentrate impacts , albeit at reduced levels due to the larger cap, within the CV sector under scenario 2 and 3. If these impacts are considered as a percent of annual total instead of B season revenue one sees that the percentage impacts fall by roughly half of their value but remain farily high.

Table 6-5 Alternative 2, Option 1a: Estimated hypothetical forgone pollock nominal gross revenue, as a percent of B season total gross revenue, by sector and year under three different allocation schemes and hard caps, 2003-2011.

2ii (sector allocation 1)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	56.1%	16.7%	11.0%	49.5%	40.9%	14.0%		3.0%		2.6%					
2004	81.5%	76.9%	16.0%	52.8%	73.6%	30.4%	56.2%	2.3%	23.7%	39.9%		33.6%		9.6%	19.3%
2005	28.2%	71.3%	18.6%	76.5%	77.8%	10.9%	26.6%	6.6%	65.3%	45.1%		20.2%	1.8%	51.4%	32.8%
2006		55.7%		93.7%	66.4%				62.5%	27.1%					
2007	21.7%	32.2%	8.2%	24.6%	32.0%										
2008															
2009															
2010															
2011	41.0%	64.8%	19.9%	63.0%	71.8%		29.4%	16.2%		22.2%		3.4%	6.7%		4.9%
4ii (sector allocation 2)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	37.4%	8.2%	7.1%	55.9%	37.0%				7.2%	3.5%					
2004	57.3%	73.2%	12.9%	54.1%	68.6%		33.6%	0.1%	25.1%	26.4%				17.8%	8.0%
2005	24.7%	32.0%	17.2%	77.7%	59.3%		16.4%	3.1%	67.8%	38.8%				61.0%	27.0%
2006		23.3%		93.7%	51.4%				75.7%	32.8%				52.5%	22.7%
2007	18.3%	22.4%	6.2%	31.5%	28.6%										
2008															
2009				6.5%	2.9%										
2010															
2011	4.6%	48.0%	19.1%	72.0%	64.6%			8.8%		4.3%			2.4%		1.2%
6 (sector allocation 3)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	14.0%	1.6%	4.9%	63.1%	34.6%				17.6%	8.5%					
2004	36.3%	66.9%	9.4%	59.8%	64.7%		4.7%		40.4%	20.4%				23.7%	10.7%
2005	21.9%	28.3%	16.6%	82.2%	59.0%				74.7%	33.0%				65.4%	28.9%
2006				97.2%	42.1%				85.5%	37.0%				63.4%	27.5%
2007	7.7%	16.7%	3.6%	36.5%	25.4%										
2008															
2009				30.8%	13.9%										
2010															
2011		41.2%	19.1%	81.1%	64.9%			5.5%	20.5%	11.7%					

Table 6-6 Alternative 2, Option 1a: Estimated hypothetical forgone pollock nominal gross revenue, as a percent of Annual total gross revenue (A and B season combined), by sector and year under three different allocation schemes and hard caps, 2003-2011.

2ii (sector allocation 1)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	26.5%	7.8%	5.1%	27.1%	20.5%	6.6%		1.4%		1.3%					
2004	35.9%	32.8%	6.8%	26.7%	33.9%	13.4%	23.9%	1.0%	12.0%	18.3%		14.3%		4.8%	8.9%
2005	13.4%	33.8%	8.8%	39.1%	38.1%	5.2%	12.6%	3.1%	33.3%	22.1%		9.6%	0.9%	26.2%	16.0%
2006		26.8%		48.6%	33.0%				32.5%	13.5%					
2007	11.0%	16.2%	4.1%	12.3%	16.1%										
2008															
2009															
2010															
2011	17.8%	38.3%	11.8%	36.3%	40.9%		17.4%	9.6%		12.6%		2.0%	3.9%		2.8%
4ii (sector allocation 2)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	17.6%	3.8%	3.3%	30.6%	18.6%				3.9%	1.8%					
2004	25.2%	31.2%	5.5%	27.3%	31.6%		14.3%	0.0%	12.7%	12.1%				9.0%	3.7%
2005	11.8%	15.2%	8.2%	39.7%	29.1%		7.8%	1.4%	34.6%	19.0%				31.1%	13.2%
2006		11.2%		48.6%	25.5%				39.3%	16.3%				27.3%	11.3%
2007	9.3%	11.3%	3.1%	15.8%	14.4%										
2008															
2009				3.6%	1.6%										
2010															
2011	2.0%	28.4%	11.3%	41.5%	36.8%			5.2%		2.4%			1.4%		0.7%
6 (sector allocation 3)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	6.6%	0.7%	2.3%	34.5%	17.4%				9.6%	4.3%					
2004	16.0%	28.5%	4.0%	30.2%	29.8%		2.0%		20.4%	9.4%				12.0%	4.9%
2005	10.4%	13.4%	7.9%	41.9%	28.9%				38.1%	16.2%				33.4%	14.2%
2006				50.5%	20.9%				44.4%	18.4%				32.9%	13.6%
2007	3.9%	8.4%	1.8%	18.3%	12.8%										
2008															
2009				17.2%	7.5%										
2010															
2011		24.4%	11.3%	46.7%	37.0%			3.2%	11.8%	6.6%					

Table 6-7 Alternative 2, Option 1b: Estimated hypothetical pollock nominal gross revenue ($ millions) at risk in the B season by sector and year under three different allocation schemes and caps, 2003-2011.

2ii (sector allocation 1)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$27	$36	$24	$123	$211	$7		$7		$13					
2004	$6	$98	$11		$115		$89	$2		$91		$86			$86
2005		$81	$27	$83	$191		$24	$26	$59	$108			$20	$54	$74
2006		$62	$4	$105	$171		$8		$80	$88				$73	$73
2007		$39	$12		$51										
2008															
2009		$14	$21	$4	$40										
2010			$7		$7										
2011	$24	$106	$37	$163	$330		$63	$35	$48	$147		$7	$33		$39
4ii (sector allocation 2)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			$3	$15	$18										
2004		$96	$9	$3	$109		$78			$78		$28			$28
2005		$75	$27	$93	$195			$22	$59	$81				$54	$54
2006		$31		$105	$136				$95	$95				$73	$73
2007			$7	$6	$13										
2008															
2009			$10	$27	$37										
2010															
2011	$35	$267	$79	$326	$707		$178	$75	$226	$479		$102	$63	$119	$284
6 (sector allocation 3)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			$1	$31	$33										
2004		$96	$9	$11	$116		$50			$50					
2005		$72	$27	$101	$200			$15	$68	$82				$59	$59
2006		$18		$105	$123				$105	$105				$80	$80
2007			$4	$18	$22										
2008															
2009				$67	$67										
2010															
2011	$25	$253	$79	$333	$689		$115	$70	$263	$448		$13	$54	$204	$272

Table 6-8 Alternative 2, Option 1b: Estimated hypothetical pollock nominal gross revenue at risk, as a percent of B season total gross revenue, by sector and year under three different allocation schemes and caps, 2003-2011.

2ii (sector allocation 1)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	56.1%	16.7%	11.0%	49.5%	40.9%	14.0%		3.0%		2.6%					
2004	12.1%	44.3%	4.8%		23.1%		40.3%	0.8%		18.3%		38.7%			17.2%
2005		28.7%	9.5%	30.3%	30.9%		8.5%	9.1%	21.4%	17.5%			7.0%	19.8%	12.0%
2006		21.6%		39.0%	27.6%		2.7%		30.0%	14.2%				27.2%	11.8%
2007		12.8%	3.9%		8.1%										
2008															
2009		5.8%	8.4%	1.8%	7.2%										
2010			2.6%		1.2%										
2011	39.7%	27.1%	9.6%	46.1%	41.1%		16.2%	9.1%	13.7%	18.3%		1.7%	8.3%		4.9%
4ii (sector allocation 2)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			1.4%	6.0%	3.5%										
2004		43.3%	4.3%	1.5%	21.8%		35.3%			15.7%		12.4%			5.5%
2005		26.5%	9.5%	34.2%	31.5%			7.7%	21.7%	13.1%				19.8%	8.7%
2006		10.9%		39.0%	21.9%				35.4%	15.3%				27.2%	11.8%
2007			2.3%	2.3%	2.0%										
2008															
2009			4.2%	10.8%	6.7%										
2010															
2011	57.4%	68.4%	20.2%	92.5%	88.0%		45.7%	19.1%	64.1%	59.6%		26.1%	16.2%	33.8%	35.3%
6 (sector allocation 3)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.7%	12.6%	6.4%										
2004		43.3%	4.3%	4.8%	23.3%		22.6%			10.1%					
2005		25.6%	9.5%	36.8%	32.3%			5.1%	24.7%	13.3%				21.4%	9.5%
2006		6.3%		39.0%	19.8%				39.0%	16.9%				30.0%	13.0%
2007			1.3%	7.0%	3.5%										
2008															
2009				26.7%	12.0%										
2010															
2011	41.0%	64.8%	20.2%	94.4%	85.8%		29.4%	17.9%	74.7%	55.8%		3.4%	14.0%	57.9%	33.8%

Table 6-9 Alternative 2, Option 1b: Estimated hypothetical pollock nominal gross revenue at risk, as a percent of Annual total gross revenue (A and B season combined), by sector and year under three different allocation schemes and caps, 2003-2011.

2ii (sector allocation 1)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	26.5%	7.8%	5.1%	27.1%	20.5%	6.6%		1.4%		1.3%					
2004	5.4%	18.9%	2.1%		10.6%		17.2%	0.4%		8.4%		16.5%			7.9%
2005		13.6%	4.5%	15.5%	15.1%		4.0%	4.3%	10.9%	8.6%			3.3%	10.1%	5.9%
2006		10.4%	0.7%	20.2%	13.7%		1.3%		15.5%	7.1%				14.1%	5.9%
2007		6.4%	2.0%		4.1%										
2008															
2009		3.1%	4.4%	1.0%	3.9%										
2010			1.5%		0.7%										
2011	17.2%	16.1%	5.7%	26.6%	23.4%		9.6%	5.4%	7.9%	10.4%		1.0%	4.9%		2.8%
4ii (sector allocation 2)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.7%	3.3%	1.8%										
2004		18.5%	1.8%	0.8%	10.0%		15.0%			7.2%		5.3%			2.5%
2005		12.6%	4.5%	17.4%	15.4%			3.7%	11.1%	6.4%				10.1%	4.3%
2006		5.3%		20.2%	10.9%				18.4%	7.6%				14.1%	5.9%
2007			1.2%	1.2%	1.0%										
2008															
2009			2.2%	6.0%	3.6%										
2010															
2011	24.9%	40.5%	12.0%	53.3%	50.1%		27.0%	11.3%	36.9%	34.0%		15.4%	9.6%	19.5%	20.1%
6 (sector allocation 3)															
Cap:			**50,000**					**200,000**					**353,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.3%	6.9%	3.2%										
2004		18.5%	1.8%	2.4%	10.7%		9.6%			4.6%					
2005		12.1%	4.5%	18.8%	15.8%			2.4%	12.6%	6.5%				10.9%	4.6%
2006		3.0%		20.2%	9.8%				20.2%	8.4%				15.5%	6.4%
2007			0.7%	3.5%	1.7%										
2008															
2009				14.9%	6.5%										
2010															
2011	17.8%	38.3%	12.0%	54.4%	48.9%		17.4%	10.6%	43.1%	31.8%		2.0%	8.3%	33.4%	19.3%

6.7 Revenue at Risk under Alternative 3

While the hard cap alternatives have the potential effect of fishery closure and resulting forgone pollock fishery revenue, the triggered closures do not directly create forgone gross revenue, but rather, they place revenue at risk of being forgone. When the closure is triggered, vessels must be relocated outside the closure areas and operators must attempt to catch their remaining allocation of pollock TAC outside the closure area. Thus, the revenue associated with remaining allocation is placed at risk of not being earned if the fishing outside the closure area is not sufficiently productive to offset any operational costs associated with relative harvesting inefficiencies outside the closure area. The previous discussion contained in the overview of costs and benefits provides a treatment of some of the implications and limitations of this "revenue at risk" analysis.

As was the case for forgone gross revenue, the revenue at risk estimate is the answer to the question of how much revenue they earned, in each of the years 2003-2011, from the projected date of the triggered closure (see EA Chapter 4) through the end of the season. Thus, it is a retrospective assessment of actual

revenue earned in those years from the projected triggered closure date forward. Presented here are the estimates of revenue at risk and the percent of total revenue that these estimates comprise.

It is also possible to take a further step with regard to analysis of triggered closure areas (Alternative 3). Having estimated the maximum gross revenues that might be lost by each fleet segment, on the assumption that the fleet is unable to make up reduced harvests by fishing in other areas, it is possible to gradually relax that analytical constraint by assuming the fleet component would have been able to make up some percentage of the revenue at risk by fishing in other areas not affected by non-Chinook salmon PSC minimization measures. This is done without specifying where the fleet segment might otherwise have operated (or at what cost), except to assume that the effort would have been redistributed to remaining open areas, during remaining open periods, under existing management regulations. With this information available for each fleet segment, readers may apply their own assumptions about the extent to which each fleet segment would be able to make up its catch elsewhere, under the differing temporal and geographic constraints and limitations provided across competing non-Chinook salmon PSC minimization alternatives, should these measures be applied to future fishing effort. In this way, individuals may produce their own estimates of the future gross revenues that might be forgone under each alternative.

To be precise, the gross revenues at risk were estimated using information about the following: (1) projected fleet segment harvests for the 2003 through 2011 fishing years assuming the provisions of each non-Chinook salmon PSC minimization alternative had been in place in that year; (2) the actual proportions of harvest of different allocations, by different sectors (e.g. CDQ, CP, CV, Motherships), based upon historical catch patterns in 2003 through 2009; and (3) estimated product mix and first wholesale product values for all pollock products by sector and year from 2001 through 2011.

Component 1 of this alternative sets the trigger PSC cap level for this large scale closure. PSC from all vessels will accrue towards the cap level selected. However if the cap level is reached, the triggered closure would not apply to participants in the RHS program. Under Component 2, however, in addition to the large closure for non-RHS participants, a select triggered area closure would apply to RHS participants. Four options of triggered closure areas and time frames are provided under Component 2. Component 3 then sets the trigger PSC cap level for the area selected under Component 2. Given that, at present, full participation in the RHS is occurring; component 1 is likely to have no effect on the fleet unless an entity drops out of the system. What is analyzed here are Options 1a, 1b, 2a, and 2b, where a triggered closure would apply to participants in the RHS with the level of impact depending on the seasonal timing of June-July (Options 1a and 2a) versus all of the B season (Options 1b, and 2b) and on the size of the closure area being at an 80% level (Options 1a and 1b), versus a 60% level (Options 2a, and 2b). Chapter 2, of the accompanying EA provides an extensive discussion of how these alternative coponents and options were developed and also provides a treatment of the management and enforcement implications associated with thes various options. A thorough review of EA Chapter 2 is quite necessary in order to contextualize the potential impacts presented here.

Table 6-10 through Table 6-12 provide these numbers in terms of dollars of revenue and also as a percent of B season total revneu and as a percent of total annual revenue by sector. A review of the data presented in these tables reveals that shore based CVs would have the vast majority of the revenue at risk and the greatest percentages of B season total first wholesale revenue at risk as well as annual total gross first wholesale revenue. Under the smallest trigger cap of 25,000 and in allocation scenario 1 the CV sector is estimated to have had as much as $168 million in revenue at risk in2005 out of the $183 million total for all fleet sectors combined. This represents approximately 61 percent of the CV B season total gross revenue and approximately 30 percent of total gross revenue.

As is expected, relaxing the trigger caps has the result of decreasing the revenue at risk. The 2005 CV revenue at risk (scenario 1), for example, decreases from $168 million to $1502 million and $127 million as the trigger cap is relaxed to 75,000 and then 200,000. The opposite effect is shown when shifting from allocation scenario 1 to allocation scenario 2 and then allocation scenario 3 with the 2005 CV revenue at risk, for example, increasing from $168 million to $172 million, and $186 million.

In percentage of B season gross revenue terms, the potential impacts to sectors other than the CV sector are very small in nearly all years under consideration. There is one relatively high impact to the CDQ sector in 2003; however, the CDQ sector has had considerably lower revenue at risk on all years since 2003. When considering revenue at risk as a percent of annual total revenue the potential impacts appear to be considerably reduced in almost all years, allocation scenarios, and cap levels for all sectors other than the CV sector. Thus, it is not likely that the CDQ, CP, or Mothership sectors will have difficulty mitigating revenue at risk under Alternative 3, option 1. The CV sector, in contrast, bears as much as 30 percent of its revenue being placed at risk in several of the years within this retrospective analysis and, therefore, would likely experience costs associated with effort relocation.

Table 6-10 Alternative 3, Option 1a: Estimated hypothetical nominal gross revenue at risk ($ millions) due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels for Option 1a, 2003-2011.

2ii (sector allocation 1) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$20	$11	$11	$144	$186	$17	$6	$8	$66	$97	$6		$4		$11
2004	$13	$47	$10	$122	$191	$11	$44	$4	$91	$149	$1	$20		$42	$63
2005		$7	$7	$168	$183		$4	$4	$150	$157		$4		$127	$131
2006		$8		$140	$147				$113	$113				$77	$77
2007	$1	$12		$66	$79	$1	$12			$13					
2008															
2009			$1	$29	$30										
2010															
2011	$11	$31	$37	$196	$275	$7	$31	$34	$116	$188		$26	$26		$52
4ii (sector allocation 2) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$19	$8	$8	$144	$181	$6	$3	$6	$99	$115				$17	$17
2004	$12	$47	$9	$122	$189	$2	$38	$3	$95	$137		$12		$46	$57
2005		$7	$7	$172	$187		$4	$2	$154	$160				$132	$132
2006				$140	$140				$117	$117				$90	$90
2007	$1	$12		$70	$83		$12		$44	$56					
2008															
2009			$1	$29	$30										
2010															
2011	$10	$31	$37	$214	$292		$26	$29	$159	$214			$23		$23
6 (sector allocation 3) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$17	$6	$8	$157	$188	$1		$6	$128	$134				$37	$37
2004	$11	$44	$7	$122	$183		$15		$106	$121				$80	$80
2005		$4	$7	$186	$196		$4		$154	$158				$150	$150
2006				$140	$140				$131	$131				$113	$113
2007	$1	$12		$74	$87				$57	$57					
2008				$14	$14										
2009				$29	$29				$12	$12					
2010															
2011	$7	$26	$35	$220	$289		$21	$29	$171	$221			$18	$67	$85

Table 6-11 Alternative 3, Option 1a: Estimated hypothetical B season nominal gross revenue at risk, as a percent of B season total gross revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 1a, 2003-2011.

2ii (sector allocation 1) Option 1a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	41.2%	5.2%	4.9%	58.0%	36.2%	34.6%	2.6%	3.9%	26.5%	18.8%	13.2%		1.9%		2.1%
2004	24.7%	21.0%	4.6%	54.0%	38.4%	21.4%	19.7%	1.6%	40.5%	30.0%	1.7%	9.2%		18.6%	12.7%
2005		2.6%	2.6%	61.4%	29.5%		1.3%	1.3%	54.7%	25.4%		1.3%		46.4%	21.1%
2006		2.6%		52.1%	23.8%				42.0%	18.2%				28.6%	12.4%
2007	1.7%	4.0%		26.2%	12.6%	1.7%	4.0%			2.1%					
2008															
2009			0.3%	11.7%	5.4%										
2010															
2011	18.4%	8.0%	9.4%	55.5%	34.2%	11.5%	8.0%	8.7%	33.0%	23.5%		6.7%	6.6%		6.5%
4ii (sector allocation 2) Option 1a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	39.6%	3.9%	3.9%	58.0%	35.1%	13.2%	1.3%	2.9%	39.7%	22.2%				6.6%	3.2%
2004	23.1%	21.0%	4.2%	54.0%	38.0%	3.3%	17.1%	1.3%	42.2%	27.6%		5.3%		20.2%	11.5%
2005		2.6%	2.6%	63.0%	30.2%		1.3%	0.7%	56.4%	25.8%				48.1%	21.2%
2006				52.1%	22.6%				43.7%	18.9%				33.6%	14.5%
2007	1.7%	4.0%		27.9%	13.3%		4.0%		17.4%	8.9%					
2008															
2009			0.3%	11.7%	5.4%										
2010															
2011	16.1%	8.0%	9.4%	60.7%	36.3%		6.7%	7.3%	45.1%	26.6%			5.9%		2.9%
6 (sector allocation 3) Option 1a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	34.6%	2.6%	3.9%	62.9%	36.4%	1.6%		2.6%	51.3%	26.1%				14.9%	7.2%
2004	21.4%	19.7%	3.3%	54.0%	36.8%		6.6%		47.2%	24.3%				35.4%	16.0%
2005		1.3%	2.3%	68.0%	31.7%		1.3%		56.4%	25.5%				54.7%	24.2%
2006				52.1%	22.6%				48.7%	21.1%				42.0%	18.2%
2007	1.7%	4.0%		29.7%	14.0%				22.7%	9.1%					
2008				5.0%	2.1%										
2009				11.7%	5.3%				5.0%	2.3%					
2010															
2011	11.5%	6.7%	9.0%	62.4%	35.9%		5.4%	7.3%	48.6%	27.5%			4.5%	19.1%	10.6%

Table 6-12 Alternative 3, Option 1a: Estimated hypothetical B season nominal gross revenue at risk, as a percent of total annual revenue, due to diverted fishing activities based on historical fishing grounds by sector allocation (panels) and trigger cap levels for Option 1a, 2003-2011.

2ii (sector allocation 1) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	19.5%	2.4%	2.3%	31.7%	18.2%	16.4%	1.2%	1.8%	14.5%	9.5%	6.2%		0.9%		1.0%
2004	10.9%	8.9%	1.9%	27.3%	17.6%	9.4%	8.4%	0.7%	20.4%	13.8%	0.7%	3.9%		9.4%	5.8%
2005		1.2%	1.2%	31.3%	14.5%		0.6%	0.6%	27.9%	12.4%		0.6%		23.7%	10.3%
2006		1.3%		27.0%	11.8%				21.8%	9.0%				14.8%	6.1%
2007	0.8%	2.0%		13.1%	6.3%	0.8%	2.0%			1.1%					
2008															
2009			0.2%	6.5%	2.9%										
2010															
2011	8.0%	4.8%	5.6%	32.0%	19.5%	5.0%	4.8%	5.1%	19.0%	13.4%		4.0%	3.9%		3.7%
4ii (sector allocation 2) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	18.7%	1.8%	1.8%	31.7%	17.6%	6.2%	0.6%	1.4%	21.7%	11.2%				3.6%	1.6%
2004	10.2%	8.9%	1.8%	27.3%	17.5%	1.5%	7.3%	0.6%	21.3%	12.7%		2.2%		10.2%	5.3%
2005		1.2%	1.2%	32.2%	14.8%		0.6%	0.3%	28.8%	12.6%				24.5%	10.4%
2006				27.0%	11.2%				22.7%	9.4%				17.4%	7.2%
2007	0.8%	2.0%		14.0%	6.7%		2.0%		8.7%	4.5%					
2008															
2009			0.2%	6.5%	2.9%										
2010															
2011	7.0%	4.8%	5.6%	35.0%	20.7%		4.0%	4.3%	26.0%	15.2%			3.5%		1.6%
6 (sector allocation 3) Option 1a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	16.4%	1.2%	1.8%	34.4%	18.3%	0.8%		1.2%	28.1%	13.1%				8.2%	3.6%
2004	9.4%	8.4%	1.4%	27.3%	17.0%		2.8%		23.9%	11.2%				17.9%	7.4%
2005		0.6%	1.1%	34.7%	15.5%		0.6%		28.8%	12.5%				27.9%	11.8%
2006				27.0%	11.2%				25.3%	10.5%				21.8%	9.0%
2007	0.8%	2.0%		14.9%	7.0%				11.4%	4.6%					
2008				2.6%	1.1%										
2009				6.5%	2.8%				2.8%	1.2%					
2010															
2011	5.0%	4.0%	5.4%	36.0%	20.5%		3.2%	4.3%	28.0%	15.7%			2.7%	11.0%	6.0%

Table 6-13 through Table 6-21 provide estimates of revenue at risk, percent of total B season gross revenue, and percent of total annual gross revenue, as presented above for option 1a, under each of options 1b, 2a, and 2b.

The potential impact of Alternative 3, option 1b in the years with greatest revenue impacts under this alternative (2004, 2011) and under the most restrictive PSC cap of 50,000 non-Chinook salmon area estimated to be approximately $97 million and $136 million in 2004 and 2011, respectively. The 2004 gross value is composed of $86 million from the CV sector, $4 million from the CP sector, and $8 million from the Mothership sector. The 2011 gross value is composed of $101 million from the CV sector, $10 million from the CP sector, $20 million from the Mothership sector, and $4 million from CDQ pollock fisheries.

In percentage of B season gross revenue terms, the potential impacts to sectors other than the CV sector are very small in nearly all years under consideration. When considering revenue at risk as a percent of annual total revenue the potential impacts appear to be considerably reduced in almost all years, allocation scenarios, and cap levels for all sectors other than the CV sector. Thus, it is not likely that the CDQ, CP, or Mothership sectors will have difficulty mitigating revenue at risk under Alternative 3, option 1. The CV sector, in contrast, bears as much as 30 percent of its revenue being placed at risk in several of the years within this retrospective analysis and, therefore, would likely experience costs associated with effort relocation.

Table 6-13 Alternative 3, Option 1b: Estimated hypothetical nominal gross revenue at risk ($ millions) due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels for Option1b, 2003-2011.

2ii (sector allocation 1) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003	$0	$3	$3	$16	$22			$1		$1					
2004	$3	$22	$7	$7	$39	$1	$20	$6		$26		$20	$1		$21
2005		$4	$8	$86	$97		$3	$8	$63	$74		$1	$7	$48	$55
2006	$0	$6		$63	$70		$5		$63	$68		$0		$43	$43
2007		$2	$1	$5	$8			$0		$0					
2008															
2009		$1	$3	$15	$18				$2	$2					
2010			$4		$4										
2011	$4	$10	$20	$101	$136	$1	$10	$19	$74	$104		$9	$18	$23	$50

4ii (sector allocation 2) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003		$1	$3	$23	$27										
2004	$2	$22	$7	$20	$50		$20	$5		$25		$15			$15
2005		$3	$8	$86	$97		$1	$7	$68	$76			$3	$49	$52
2006		$5		$67	$72		$2		$63	$65				$54	$54
2007		$0	$1	$9	$10										
2008				$2	$2										
2009			$1	$16	$17				$2	$2					
2010			$2	$6	$8										
2011	$4	$10	$20	$101	$136		$9	$19	$78	$107		$1	$15	$33	$49

6 (sector allocation 3) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003			$3	$31	$34				$9	$9					
2004	$1	$20	$6	$30	$56		$18	$4	$3	$25		$7			$7
2005		$3	$8	$95	$106			$7	$78	$85				$53	$53
2006		$5		$67	$72		$0		$63	$63				$63	$63
2007			$0	$15	$15				$1	$1					
2008				$11	$11										
2009			$1	$26	$27				$5	$5					
2010				$15	$15										
2011	$1	$10	$20	$101	$132		$9	$18	$95	$122			$10	$49	$59

Table 6-14 Alternative 3, Option 1b: Estimated hypothetical B season nominal gross revenue at risk, as a percent of B season total gross revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 1b, 2003-2011.

2ii (sector allocation 1) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003	0.4%	1.2%	1.6%	6.3%	4.2%			0.4%		0.2%					
2004	5.9%	9.8%	3.3%	3.1%	7.8%	1.0%	9.0%	2.7%		5.3%		9.0%	0.6%		4.3%
2005		1.3%	2.8%	31.3%	15.7%		1.1%	2.8%	23.0%	11.9%		0.2%	2.3%	17.6%	8.9%
2006		2.1%		23.5%	11.2%		1.8%		23.5%	11.0%		0.1%		15.9%	6.9%
2007		0.6%	0.2%	2.2%	1.3%			0.1%		0.0%					
2008															
2009		0.3%	1.1%	5.9%	3.3%				0.6%	0.3%					
2010			1.6%		0.7%										
2011	7.2%	2.5%	5.2%	28.7%	16.9%	1.2%	2.5%	5.0%	21.1%	13.0%		2.4%	4.6%	6.5%	6.3%

4ii (sector allocation 2) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003		0.5%	1.6%	9.1%	5.3%										
2004	3.8%	9.8%	3.2%	8.7%	10.1%		9.0%	2.4%		5.1%		6.7%			3.0%
2005		1.1%	2.8%	31.3%	15.6%		0.4%	2.5%	24.8%	12.2%			1.2%	17.7%	8.4%
2006		1.8%		25.0%	11.7%		0.8%		23.5%	10.5%				20.0%	8.6%
2007		0.1%	0.2%	3.6%	1.6%										
2008				0.6%	0.2%										
2009			0.5%	6.3%	3.1%				0.8%	0.4%					
2010			0.6%	2.5%	1.4%										
2011	7.0%	2.5%	5.2%	28.7%	16.9%		2.4%	5.0%	22.2%	13.4%		0.2%	3.9%	9.5%	6.1%

6 (sector allocation 3) Option 1b

Cap:	25,000					75,000					200,000				
	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet	CDQ	CP	M	CV	All fleet
2003			1.6%	12.4%	6.6%				3.5%	1.7%					
2004	1.0%	9.0%	2.7%	13.1%	11.3%		8.3%	1.7%	1.3%	5.1%		3.1%			1.4%
2005		1.1%	2.8%	34.6%	17.1%			2.3%	28.6%	13.7%				19.3%	8.5%
2006		1.8%		25.0%	11.7%		0.1%		23.5%	10.2%				23.5%	10.2%
2007			0.1%	6.0%	2.4%				0.5%	0.2%					
2008				3.8%	1.5%										
2009			0.3%	10.5%	4.9%				2.1%	0.9%					
2010				6.0%	2.5%										
2011	1.2%	2.5%	5.2%	28.7%	16.4%		2.4%	4.6%	26.8%	15.2%			2.7%	13.9%	7.4%

Table 6-15 Alternative 3, Option 1b: Estimated hypothetical B season nominal gross revenue at risk, as a percent of total annual revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels , Option 1b, 2003-2011.

2ii (sector allocation 1) Option 1b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	0.2%	0.6%	0.7%	3.4%	2.1%			0.2%		0.1%					
2004	2.6%	4.2%	1.4%	1.6%	3.6%	0.4%	3.8%	1.2%		2.4%		3.8%	0.3%		2.0%
2005		0.6%	1.3%	16.0%	7.7%		0.5%	1.3%	11.7%	5.9%		0.1%	1.1%	9.0%	4.4%
2006	0.4%	1.0%		12.2%	5.6%		0.8%		12.2%	5.5%		0.1%		8.2%	3.4%
2007		0.3%	0.1%	1.1%	0.6%			0.0%		0.0%					
2008															
2009		0.1%	0.6%	3.3%	1.8%				0.4%	0.2%					
2010			0.9%		0.4%										
2011	3.1%	1.5%	3.1%	16.6%	9.6%	0.5%	1.5%	3.0%	12.2%	7.4%		1.4%	2.7%	3.7%	3.6%
4ii (sector allocation 2) Option 1b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003		0.2%	0.7%	5.0%	2.6%										
2004	1.7%	4.2%	1.4%	4.4%	4.6%		3.8%	1.0%		2.3%		2.9%			1.4%
2005		0.5%	1.3%	16.0%	7.6%		0.2%	1.2%	12.6%	6.0%			0.6%	9.1%	4.1%
2006		0.9%		13.0%	5.8%		0.4%		12.2%	5.2%				10.4%	4.3%
2007		0.1%	0.1%	1.8%	0.8%										
2008				0.3%	0.1%										
2009			0.2%	3.5%	1.7%				0.5%	0.2%					
2010			0.3%	1.4%	0.8%										
2011	3.0%	1.5%	3.1%	16.6%	9.6%		1.4%	3.0%	12.8%	7.6%		0.1%	2.3%	5.5%	3.5%
6 (sector allocation 3) Option 1b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.7%	6.8%	3.3%				1.9%	0.9%					
2004	0.4%	3.8%	1.2%	6.6%	5.2%		3.6%	0.7%	0.6%	2.3%		1.3%			0.6%
2005		0.5%	1.3%	17.7%	8.4%			1.1%	14.6%	6.7%				9.8%	4.2%
2006		0.8%		13.0%	5.8%		0.0%		12.2%	5.1%				12.2%	5.1%
2007			0.0%	3.0%	1.2%				0.3%	0.1%					
2008				2.0%	0.8%										
2009			0.2%	5.9%	2.6%				1.2%	0.5%					
2010				3.4%	1.4%										
2011	0.5%	1.5%	3.1%	16.6%	9.4%		1.4%	2.7%	15.5%	8.6%			1.6%	8.0%	4.2%

The potential impact of Alternative 3, option 2a in the years with greatest revenue impacts under this alternative (2005, 2011) and under the most restrictive PSC cap of 50,000 non-Chinook salmon area estimated to be approximately $131 million and $184 million in 2005 and 2011, respectively. The 2005 gross value is composed of $122 million from the CV sector, $4 million from the CP sector, and $5 million from the Mothership sector. The 2011 gross value is composed of $122 million from the CV sector, $26 million from the CP sector, $26 million from the Mothership sector, and $10 million from CDQ pollock fisheries.

In percentage of B season gross revenue terms, the potential impacts to sectors other than the CV sector are realtively small in nearly all years under consideration. However, CDQ impacts are approximately 30 percent of B season gross revenue in 2003 and impacts to the CDQ and CP sectors exeed 13 percent and 14 percent, respectively, in 2004. When considering revenue at risk as a percent of annual total revenue the potential impacts appear to be considerably reduced in almost all years, allocation scenarios, and cap levels for all sectors other than the CV sector. Thus, it is not likely that the CDQ, CP, or Mothership sectors will have difficulty mitigating revenue at risk under Alternative 3, option 2a. The CV sector, in contrast, bears as much as 25 percent of its revenue being placed at risk in several of the years within this retrospective analysis and, therefore, would likely experience costs associated with effort relocation.

Table 6-16 Alternative 3, Option 2a: Estimated hypothetical nominal gross revenue at risk ($ millions) due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels for Option 2a, 2003-2011.

2ii (sector allocation 1) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$15	$11	$6	$95	$127	$12	$6	$6	$33	$56	$6		$4		$11
2004	$7	$32	$5	$72	$116	$6	$32	$1	$53	$92	$1	$17		$30	$49
2005		$4	$5	$122	$131		$4	$2	$113	$119				$91	$91
2006		$4		$108	$112				$86	$86				$59	$59
2007	$1	$12		$52	$66	$1	$12			$13					
2008															
2009			$1	$17	$17										
2010															
2011	$10	$26	$26	$122	$184	$6	$26	$24	$67	$123		$21	$18		$39
4ii (sector allocation 2) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$14	$6	$6	$95	$121	$6	$3	$6	$54	$69				$12	$12
2004	$6	$32	$4	$72	$114	$1	$26	$1	$53	$81		$9		$34	$43
2005		$4	$5	$127	$135			$2	$113	$115				$100	$100
2006				$108	$108				$90	$90				$72	$72
2007	$1	$12		$52	$66		$12		$39	$51					
2008															
2009			$1	$17	$17										
2010															
2011	$8	$26	$26	$122	$183		$26	$20	$92	$138			$16		$16
6 (sector allocation 3) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	$12	$6	$6	$99	$122	$1		$6	$78	$85				$25	$25
2004	$6	$32	$2	$72	$112		$12		$65	$76				$46	$46
2005			$5	$136	$141				$113	$113				$113	$113
2006				$108	$108				$99	$99				$86	$86
2007	$1	$12		$52	$66				$48	$48					
2008				$10	$10										
2009				$17	$17				$4	$4					
2010															
2011	$6	$26	$24	$135	$191		$21	$20	$104	$145			$11	$49	$60

Table 6-17 Alternative 3, Option 2a: Estimated hypothetical B season nominal gross revenue at risk, as a percent of B season total gross revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 2a, 2003-2011.

2ii (sector allocation 1) Option 2a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	31.3%	5.2%	2.6%	38.1%	24.7%	24.7%	2.6%	2.6%	13.2%	10.9%	13.2%		1.9%		2.1%
2004	13.2%	14.4%	2.3%	32.0%	23.3%	11.5%	14.4%	0.3%	23.6%	18.4%	1.7%	7.9%		13.5%	9.8%
2005		1.3%	1.6%	44.8%	21.1%		1.3%	0.7%	41.5%	19.2%				33.2%	14.7%
2006		1.3%		40.3%	18.1%				31.9%	13.8%				21.8%	9.5%
2007	1.7%	4.0%		20.9%	10.5%	1.7%	4.0%			2.1%					
2008															
2009			0.3%	6.7%	3.2%										
2010															
2011	16.1%	6.7%	6.6%	34.7%	22.9%	9.2%	6.7%	6.3%	19.1%	15.4%		5.4%	4.5%		4.8%
4ii (sector allocation 2) Option 2a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	29.7%	2.6%	2.6%	38.1%	23.4%	13.2%	1.3%	2.6%	21.5%	13.3%				5.0%	2.4%
2004	11.5%	14.4%	2.0%	32.0%	23.0%	1.7%	11.8%	0.3%	23.6%	16.3%		3.9%		15.2%	8.6%
2005		1.3%	1.6%	46.4%	21.9%			0.7%	41.5%	18.6%				36.5%	16.1%
2006				40.3%	17.5%				33.6%	14.5%				26.9%	11.6%
2007	1.7%	4.0%		20.9%	10.5%		4.0%		15.7%	8.2%					
2008															
2009			0.3%	6.7%	3.2%										
2010															
2011	13.8%	6.7%	6.6%	34.7%	22.7%		6.7%	5.2%	26.0%	17.2%			4.2%		2.0%
6 (sector allocation 3) Option 2a															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	24.7%	2.6%	2.6%	39.7%	23.7%	1.6%		2.6%	31.5%	16.5%				9.9%	4.8%
2004	11.5%	14.4%	1.0%	32.0%	22.6%		5.3%		28.7%	15.3%				20.2%	9.2%
2005			1.6%	49.8%	22.7%				41.5%	18.3%				41.5%	18.3%
2006				40.3%	17.5%				37.0%	16.0%				31.9%	13.8%
2007	1.7%	4.0%		20.9%	10.5%				19.2%	7.7%					
2008				3.4%	1.4%										
2009				6.7%	3.0%				1.7%	0.8%					
2010															
2011	9.2%	6.7%	6.3%	38.2%	23.7%		5.4%	5.2%	29.5%	18.1%			2.8%	13.9%	7.4%

Table 6-18 Alternative 3, Option 2a: Estimated hypothetical B season nominal gross revenue at risk, as a percent of total annual revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 2a, 2003-2011.

2ii (sector allocation 1) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	14.8%	2.4%	1.2%	20.8%	12.4%	11.7%	1.2%	1.2%	7.2%	5.5%	6.2%		0.9%		1.0%
2004	5.8%	6.2%	1.0%	16.2%	10.7%	5.1%	6.2%	0.1%	11.9%	8.5%	0.7%	3.4%		6.8%	4.5%
2005		0.6%	0.8%	22.9%	10.4%		0.6%	0.3%	21.2%	9.4%				16.9%	7.2%
2006		0.6%		20.9%	9.0%				16.6%	6.9%				11.3%	4.7%
2007	0.8%	2.0%		10.5%	5.3%	0.8%	2.0%			1.1%					
2008															
2009			0.2%	3.7%	1.7%										
2010															
2011	7.0%	4.0%	3.9%	20.0%	13.1%	4.0%	4.0%	3.7%	11.0%	8.8%		3.2%	2.7%		2.7%
4ii (sector allocation 2) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	14.0%	1.2%	1.2%	20.8%	11.8%	6.2%	0.6%	1.2%	11.8%	6.7%				2.7%	1.2%
2004	5.1%	6.2%	0.8%	16.2%	10.6%	0.7%	5.0%	0.1%	11.9%	7.5%		1.7%		7.7%	4.0%
2005		0.6%	0.8%	23.7%	10.7%			0.3%	21.2%	9.1%				18.6%	7.9%
2006				20.9%	8.7%				17.4%	7.2%				14.0%	5.8%
2007	0.8%	2.0%		10.5%	5.3%		2.0%		7.9%	4.1%					
2008															
2009			0.2%	3.7%	1.7%										
2010															
2011	6.0%	4.0%	3.9%	20.0%	13.0%		4.0%	3.1%	15.0%	9.8%			2.5%		1.2%
6 (sector allocation 3) Option 2a															
Cap:	**25,000**					**75,000**					**200,000**				
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003	11.7%	1.2%	1.2%	21.7%	11.9%	0.8%		1.2%	17.2%	8.3%				5.4%	2.4%
2004	5.1%	6.2%	0.4%	16.2%	10.4%		2.2%		14.5%	7.0%				10.2%	4.2%
2005			0.8%	25.4%	11.1%				21.2%	9.0%				21.2%	9.0%
2006				20.9%	8.7%				19.2%	8.0%				16.6%	6.9%
2007	0.8%	2.0%		10.5%	5.3%				9.6%	3.9%					
2008				1.8%	0.7%										
2009				3.7%	1.6%				0.9%	0.4%					
2010															
2011	4.0%	4.0%	3.7%	22.0%	13.5%		3.2%	3.1%	17.0%	10.3%			1.6%	8.0%	4.2%

The potential impact of Alternative 3, option 2b in the years with greatest revenue impacts under this alternative (2005, 2011) and under the most restrictive PSC cap of 50,000 non-Chinook salmon with allocation scenario 1 are estimated to be approximately $72 million and $65 million in 2005 and 2011, respectively. The 2005 gross value is composed of $63 million from the CV sector, $2 million from the CP sector, and $7 million from the Mothership sector. The 2011 gross value is composed of $54 million from the CV sector, $1 million from the CP sector, $9 million from the Mothership sector, and less than $1 million from CDQ pollock fisheries. Of note is that these impacts tend to incrase under allocation scenarios 2 and 3, with 2005 all fleet revenue at risk estimated to be $80 million.

Consistent with analysis of the preivious options, in percentage of B season gross revenue terms the potential impacts to sectors other than the CV sector are realtively small in nearly all years under consideration. When considering revenue at risk as a percent of annual total revenue the potential impacts appear to be considerably reduced in almost all years, allocation scenarios, and cap levels for all sectors other than the CV sector. Thus, it is not likely that the CDQ, CP, or Mothership sectors will have difficulty mitigating revenue at risk under Alternative 3, option 2a. The CV sector, in contrast, bears as much as 10 to 13 percent of its revenue being placed at risk in several of the years within this retrospective analysis.

Table 6-19 Alternative 3, Option 2b: Estimated hypothetical nominal gross revenue at risk ($ millions) due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels for Option 2b.

2ii (sector allocation 1) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003		$1	$3	$15	$19			$1		$1					
2004	$3	$15	$6	$7	$31	$1	$15	$4		$19		$15	$1		$16
2005		$2	$7	$63	$72		$2	$7	$44	$52		$0	$6	$32	$39
2006		$3		$47	$50		$3		$47	$50				$27	$27
2007			$0	$3	$3			$0		$0					
2008															
2009		$0	$2	$11	$12				$2	$2					
2010			$4		$4										
2011	$0	$1	$9	$54	$65	$0	$1	$9	$34	$45		$1	$7	$9	$18
4ii (sector allocation 2) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			$3	$22	$25										
2004	$2	$15	$6	$19	$42		$15	$4		$19		$11			$11
2005		$2	$7	$63	$72		$0	$7	$46	$53			$3	$33	$37
2006		$3		$50	$54		$0		$47	$47				$37	$37
2007			$0	$5	$5										
2008				$1	$1										
2009			$1	$11	$12				$2	$2					
2010			$1	$5	$6										
2011	$0	$1	$9	$54	$65		$1	$9	$38	$48			$7	$10	$18
6 (sector allocation 3) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			$3	$29	$33				$9	$9					
2004	$1	$15	$5	$27	$47		$15	$3	$3	$21		$4			$4
2005		$2	$7	$72	$80			$6	$56	$63				$34	$34
2006		$3		$50	$54				$47	$47				$47	$47
2007			$0	$8	$8				$1	$1					
2008				$7	$7										
2009			$1	$21	$22				$3	$3					
2010				$10	$10										
2011	$0	$1	$9	$54	$65		$1	$7	$54	$63			$3	$22	$25

Table 6-20 Alternative 3, Option 2b: Estimated hypothetical B season nominal gross revenue at risk, as a percent of B season total gross revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 2b, 2003-2011.

2ii (sector allocation 1) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003		0.3%	1.6%	6.2%	3.8%			0.4%		0.2%					
2004	5.7%	6.8%	2.7%	3.1%	6.2%	1.2%	6.7%	1.7%		3.9%		6.7%	0.6%		3.3%
2005		0.6%	2.3%	23.2%	11.6%		0.5%	2.3%	16.2%	8.5%		0.0%	2.2%	11.9%	6.3%
2006		1.2%		17.4%	8.1%		1.1%		17.4%	8.0%				10.0%	4.3%
2007			0.0%	1.2%	0.5%			0.0%		0.0%					
2008															
2009		0.0%	0.7%	4.3%	2.3%				0.6%	0.3%					
2010			1.5%		0.7%										
2011	0.7%	0.4%	2.3%	15.3%	8.0%	0.5%	0.4%	2.3%	9.7%	5.6%		0.3%	1.9%	2.6%	2.3%
4ii (sector allocation 2) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			1.6%	8.6%	4.8%										
2004	4.0%	6.8%	2.7%	8.5%	8.4%		6.7%	1.7%		3.7%		5.1%			2.3%
2005		0.6%	2.3%	23.2%	11.6%		0.0%	2.3%	16.8%	8.5%			1.2%	12.1%	5.9%
2006		1.1%		18.8%	8.6%		0.2%		17.4%	7.6%				13.8%	6.0%
2007			0.0%	2.0%	0.8%										
2008				0.4%	0.2%										
2009			0.4%	4.3%	2.1%				0.6%	0.3%					
2010			0.5%	2.0%	1.1%										
2011	0.6%	0.4%	2.3%	15.3%	8.0%		0.3%	2.3%	10.8%	6.0%			1.9%	2.9%	2.2%
6 (sector allocation 3) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			1.6%	11.8%	6.4%				3.5%	1.7%					
2004	1.2%	6.7%	2.2%	11.8%	9.5%		6.7%	1.5%	1.3%	4.2%		1.6%			0.7%
2005		0.5%	2.3%	26.2%	12.9%			2.2%	20.6%	10.1%				12.5%	5.5%
2006		1.1%		18.8%	8.6%				17.4%	7.5%				17.4%	7.5%
2007			0.0%	3.1%	1.3%				0.5%	0.2%					
2008				2.3%	0.9%										
2009			0.4%	8.3%	3.9%				1.0%	0.5%					
2010				4.1%	1.7%										
2011	0.5%	0.4%	2.3%	15.3%	8.0%		0.3%	1.9%	15.3%	7.8%			0.8%	6.3%	3.1%

Table 6-21 Alternative 3, Option 2b: Estimated hypothetical B season nominal gross revenue at risk, as a percent of total annual revenue, due to diverted fishing activities from historical fishing grounds by sector allocation (panels) and trigger cap levels, Option 2b, 2003-2011.

2ii (sector allocation 1) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003		0.1%	0.7%	3.4%	1.9%			0.2%		0.1%					
2004	2.5%	2.9%	1.1%	1.6%	2.8%	0.5%	2.9%	0.7%		1.8%		2.9%	0.3%		1.5%
2005		0.3%	1.1%	11.8%	5.7%		0.3%	1.1%	8.2%	4.1%		0.0%	1.0%	6.1%	3.1%
2006		0.6%		9.0%	4.0%		0.5%		9.0%	4.0%				5.2%	2.2%
2007			0.0%	0.6%	0.2%			0.0%		0.0%					
2008															
2009		0.0%	0.4%	2.4%	1.2%				0.4%	0.2%					
2010			0.8%		0.4%										
2011	0.3%	0.2%	1.3%	8.8%	4.6%	0.2%	0.2%	1.3%	5.6%	3.2%		0.2%	1.1%	1.5%	1.3%
4ii (sector allocation 2) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.7%	4.7%	2.4%										
2004	1.7%	2.9%	1.1%	4.3%	3.9%		2.9%	0.7%		1.7%		2.2%			1.0%
2005		0.3%	1.1%	11.8%	5.7%		0.0%	1.1%	8.6%	4.2%			0.6%	6.2%	2.9%
2006		0.5%		9.8%	4.3%		0.1%		9.0%	3.8%				7.2%	3.0%
2007			0.0%	1.0%	0.4%										
2008				0.2%	0.1%										
2009			0.2%	2.4%	1.1%				0.4%	0.2%					
2010			0.3%	1.1%	0.6%										
2011	0.2%	0.2%	1.3%	8.8%	4.6%		0.2%	1.3%	6.2%	3.4%			1.1%	1.7%	1.3%
6 (sector allocation 3) Option 2b															
Cap:			**25,000**					**75,000**					**200,000**		
	CDQ	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**	**CDQ**	**CP**	**M**	**CV**	**All fleet**
2003			0.7%	6.5%	3.2%				1.9%	0.8%					
2004	0.5%	2.9%	0.9%	6.0%	4.3%		2.9%	0.6%	0.6%	1.9%		0.7%			0.3%
2005		0.3%	1.1%	13.4%	6.3%			1.0%	10.5%	5.0%				6.4%	2.7%
2006		0.5%		9.8%	4.3%				9.0%	3.7%				9.0%	3.7%
2007			0.0%	1.6%	0.6%				0.3%	0.1%					
2008				1.2%	0.5%										
2009			0.2%	4.7%	2.1%				0.6%	0.3%					
2010				2.3%	1.0%										
2011	0.2%	0.2%	1.3%	8.8%	4.6%		0.2%	1.1%	8.8%	4.5%			0.4%	3.6%	1.8%

6.8 Implications of Sector Transfers and Rollovers

Alternative 2 contains provisions for transfers and rollovers via component 3, while Alternative 3 provides for transfers and rollovers in component 5. These options would only apply if the sector level PSC caps under Component 2 and the inshore CV sector level cap is further allocated among the inshore cooperatives and the inshore open access fishery (if the inshore open access fishery existed in a particular year) under Component 4. Option 1 or Option 2 or both could be selected.

When a salmon inshore cooperative cap is reached, the cooperative must stop fishing for pollock and may:

Option 1) Transfer (lease) its remaining pollock to another inshore cooperative for the remainder of the season or year. Allow inter-cooperative transfers of pollock to the degree currently authorized by the AFA.

Option 2) Transfer salmon PSC cap amounts from other inshore cooperatives (industry initiated)

Suboption: Limit transfers to the following: a) 50%, b) 70%, or c) 90% of available salmon

Option 1, would allow an inshore cooperative to transfer pollock to another inshore cooperative after the first cooperative's Chinook salmon allocation is reached. This option provides another means in addition to the transfer of the Chinook salmon PSC allocations to match available pollock and available salmon PSC for the inshore cooperatives.

Sections 206(a) and (b) of the AFA establish the allocation of the TAC of pollock among the different AFA sectors, including the CDQ Program. Section 213(c) allows the Council to supersede some provisions of the AFA under certain circumstances. However, section 213(c) specifically does not allow the Council to supersede the sector allocations of pollock in sections 206(a) and 206(b). Therefore, the AFA's allocation requirements effectively preclude the transfer of pollock from *one sector to another*. However, the AFA would allow the transfer of pollock among the inshore cooperatives. Such transfers would be subject to the 90 percent processor delivery requirement in section 210(b), which requires that 90 percent of the pollock allocated to an inshore cooperative must be delivered to the inshore processor associated with that cooperative. The AFA specifically requires that this provision be included in the inshore cooperative contracts and NMFS regulations contain this contract requirement in the inshore cooperative permitting requirements at § 679.4(l)(6).

Although not prohibited by the AFA, NMFS regulations currently do not authorize the transfer of pollock among the inshore cooperatives. Thus far, regulations authorizing inter-cooperative transfers of pollock have not been recommended to NMFS by the Council. However, regulations could be amended to allow pollock transfers among inshore cooperatives, subject to the requirement that the inshore cooperative contracts continue to include the 90 percent processor delivery requirement. These regulatory amendments could be made without requiring the Council to supercede requirements of the AFA.

Full transferability of pollock among the inshore cooperatives by superseding the 90 percent processor delivery requirements of subsections 210(b)(1) and (b)(6), could be allowed as long as the findings required in section 213(c)(1) of the AFA are made. To supersede this requirement, the Council would have to provide a rationale that explained why the proposed action mitigated adverse effects on fishery cooperatives and how it took into account all factors affecting the fisheries, including rationale explaining that the action was imposed fairly and equitably, to the extent practicable, among and within the sectors in the pollock fishery.

Option 1 would require NMFS to monitor the pollock harvest for each cooperative and track amounts of transferred pollock among cooperatives. By way of example, NMFS has implemented management programs that allow the transfer of fish among entities in various BSAI and Gulf of Alaska fisheries. These programs use a combination of electronic reporting done by the processing plant, online account access for cooperatives, and NMFS approval and tracking of transfers. Option 1 would be similar to other programs in that annual allocations of pollock would be tracked for each cooperative using the existing NMFS's Catch Accounting System (CAS) and electronic reporting system (eLandings). The CAS is configured to track cooperative-specific amounts of pollock, but in its current configuration does not accommodate pollock transfers. Thus, adjustment to the CAS would be needed to accommodate programming complexities associated with transfers, business rules, and CAS account structure.

Pollock transfers would require NMFS approval before the transaction could be completed. Upon receipt of a transfer application, NMFS would review a cooperative's catch to ensure its salmon cap was reached and that an adequate amount of pollock was available. The transfer process could be through eLandings or using a paper application process. NMFS prefers online transfers because paper-based transfers increase staff burden, the time required to complete a transfer, and may only be completed during business hours.

Online accounting of pollock is dependent on the CAS structure, which is the primary repository for catch data. The online interface would need to allow harvesters and NMFS to check account balances, make and accept transfers of pollock, and allow account balances to be updated based on transferred pollock and inseason reallocations of pollock from the ICA and the Aleutian Islands, should such reallocations occur. The online system would not allow cooperatives to receive transfers of pollock if they do not have any remaining Chinook salmon PSC allocation. Thus, pollock allocation amounts and associated CAS account structure is dependent on whether salmon PSC is allocated to the cooperative level and transferability of salmon is allowed. Any changes to the CAS required for salmon allocation transfers would need to interface with pollock transfer accounting.

As noted in methods, the analysis assumes between cooperative transferability. Between sector transferability is evaluated here for Alternative 2, option 1a for illustrative purposes. This option assumes "perfect" transferability in that sectors would exchange allocated chum salmon PSC freely. By year, comparing with and without transferability shows that adding transferability generally increases the amount of forgone pollock and reduces the effectiveness of saving chum salmon. (Table 5-80).

The fundamental purpose of allowing transfers and rollovers of PSC cap amounts that remain unharvested is to allow other sectors that may have attained their PSC caps to utilize remaining PSC cap amounts, under the aggregate cap, to harvest either all, or a portion of the remainder of their pollock allocation. In this way, transferability and rollovers of unused PSC caps are intended to maximize the economic yield from the pollock resouces while meeting the aggregate cap level deemed practicable by the Council. Clearly, increasing pollock harvest has economic benefits, in terms of revenue, to pollock harvesters while at the same time potentially reducing salmon savings that may occur if a sector hits its allocation of a cap and must stop fishing, either altogether (Alt. 2) or in a specific area (Alt. 3) and has no option to obtain (transfer) or receive (rollover) additional PSC allowances. The level of the salmon savings that may be deemed practicable with rollovers and tranfers can be set using the suboption which limit transfers and rollovers to either 50 percent, 70 percent, or 90 percent of available PSC cap.

Actual transferability options would be initially from sector specific allocations (the analysis above was as if there were no sector allocations) and then in a given year, a "clean" sector could transfer their chum salmon PSC to a sector that requires more. Logically this poses challenges for analysis because the conditions for a transfer would have to be that the "clean" sector would know in advance that they have salmon to transfer to a sector needing more PSC salmon to extend their pollock fishing. Alternatively the clean sector could finish their pollock fishing earlier than the sector needing more PSC salmon and transfer at that time. Simulating either condition would require apriori knowledge about the interaction between sectors which are unknown. Additionally, such a system will add complexity to management and enforcement, and will obviously result in higher salmon PSC (within a cap) and less foregone pollock.

To provide some evaluation of this option one scenario to for Alternative 2, option 1a) with a cap of 50,000 and sector allocation 6. In 2005 had this scenario been in place all sectors would have come up against their cap so there would be no transfers (with motherships and shorebased CV sectors hitting their cap on the 2nd and 4th of July, respectively). In 2006, shorebased boats would have hit their cap on June 14th, and remarkably all other sectors stay below their cap. Assuming somehow that the other sectors would know how much salmon they would catch at the end of the year, then the difference between the

remaining salmon and the sum of their caps is 7,645 chum. That amount would not be enough for the shorebased sector to fish even one more day (their initial allocation is 22,385 salmon; on June 13th they went from 13,838 salmon to 30,390). In summary, the idea of transfers would be beneficial in principle; however, "what ifs" evaluations from historical data are limited to illustrate performance benefits.

Table 6-22 showing the pollock foregone by year and sector between the Alternative 2 1a) without transferability (default) and with transferability A subset of estimated sum of chum salmon saved (AEQ) by region and year under 3 different allocation schemes and hard caps for Alternative 2, component 2 **option 1a)**, 2004-2011 with and without transferabilit. The shaded column represents the sum of annual estimated AEQ impact that occurred due to pollock fishing whereas the other values represent the amount (in numbers of fish) that would have been saved had the measures been in place.

		Sector							
		CDQ		CP		M		S	
		Transferability?		Transferability?		Transferability?		Transferability?	
Cap	Year	No	Yes	No	Yes	No	Yes	No	Yes
	2003	33,787	61,451	32,926	67,320	28,469	42,436	220,230	191,720
	2004	51,765	77,704	289,711	132,913	50,902	51,002	204,602	231,894
	2005	22,469	65,580	127,176	246,828	68,474	58,303	303,437	298,886
	2006		89,774	93,943	295,256		74,320	360,034	338,987
50,000	2007	15,434	13,128	82,889	71,579	22,808	22,092	103,343	103,475
	2008								
	2009							13,558	
	2010								
	2011	2,323	43,597	151,590	186,988	60,464	51,428	215,455	209,896
	2003							28,381	
	2004		36,085	132,913	10,724	458	24,342	95,021	95,021
	2005		46,176	65,017	203,020	12,128	43,124	264,732	245,510
	2006		30,693		171,807		36,076	290,957	223,714
200,000	2007								
	2008								
	2009								
	2010								
	2011					27,827			
	2003								
	2004		21,477		3,336		20,322	67,238	57,316
	2005		34,094		156,000		32,341	238,356	196,470
	2006							201,854	
353,000	2007								
	2008								
	2009								
	2010								
	2011					7,574			

6.9 Implications of Sector and Cooperative level Quota Share Allocation of PSC Caps

Under Alternative 2, if non-Chinook salmon PSC is allocated among the sectors, and an allocation is made to the inshore sector then the cooperative provisions could allow further allocation of transferable or non-transferable salmon PSC allocations to the inshore cooperatives. Each inshore cooperative and the inshore limited access fishery (if the inshore limited access fishery existed in a particular year) would receive a salmon allocation managed at the cooperative level. If the cooperative or limited access fishery

salmon cap is reached, the cooperative or limited access fishery must stop fishing for pollock. The initial allocation of salmon by cooperative within the inshore CV fleet or to the limited access fishery would be based upon the proportion of total sector pollock catch associated with the vessels in the cooperative or limited access fishery (see EA Chapter 2).

Also under Alternative 2 are options to allow transfers among inshore cooperatives, provided that sector allocations are made and further allocated among the inshore cooperatives and the inshore limited access fishery (if the inshore limited access fishery existed in a particular year). These provisions would allow intercooperative leases of non-Chinook salmon PSC allocations or industry initiated transfers with the suboptions of 50 percent, 70 percent and 90 percent as defined for sector transfers. Under these options, when a salmon cooperative cap is reached, the cooperative must stop fishing for pollock and may lease additional non-Chinook salmon PSC allocation or arrange a voluntary transfer from another inshore cooperative. These provisions would provide additional opportunity for the inshore cooperatives to mitigate effects of non-Chinook salmon PSC caps in essentially the same way that transfers provide that opportunity at the overall sector level.

Cooperative provisions under a binding hard cap have the potential to mitigate some of the potential for an induced race for fish, at least among the inshore cooperatives. Allocation of PSC to the cooperative level converts the allocation by sector into smaller allocations at the inshore cooperative level. Each inshore cooperative would then have to manage the operations of its members to stay under their specific cap, or stop fishing. As such, there are clear economic incentives to avoid PSC. At the larger sector level, those economic incentives are somewhat diminished as higher capacity operators may see an advantage in catching their pollock allocation quickly, with little regard for non-Chinook salmon PSC so long as the sector level PSC allocation is not exceeded. In such circumstances, the smallest or least capable catcher vessels may be adversely affected by the actions of the larger, more capable, vessels (i.e., the incentives to reopen the "race-for-fish," at least at the sector level. This reality, in turn, could affect the formation and membership of the inshore cooperatives themselves, resulting in "capital stuffing" within cooperatives. It is not clear at present to what extent this might become a reality; however, allocation at the inshore cooperative level may mitigate some of the risk associated with the implications of a sector level race for fish for the CV sector.

As the Council's Scientific and Statistical Committee (SSC) correctly observed (October 2008), there is a fundamental difference between a target or retainable incidental catch "*allocation*," on the one hand, and a PSC limit "*allowance*," on the other. They state, in relevant part, *"The former imparts a harvest 'use privilege', while the latter must be regarded as a "prohibition" against harvest (to the maximum extent practicable), with an absolute cap. No "use privilege" is implied by a PSC …. Instead, every practicable effort is required to be made to avoid use of this PSC, and if avoidance is not possible, to minimize its occurrence."* In the former case, the allocation establishes a use-privilege and provides for conversion of the non-target catch to private ownership. In the case of a PSC allowance, no use-privilege authorizing removal of a specific amount of resource is conveyed and conversion of PSC to private ownership is strictly prohibited. These are crucial differences that should not be lost sight of. Indeed, this is so critical a distinction that it has been enshrined as National Standard 9 of the Magnuson-Stevens Act:

> (9) Conservation and management measures shall, to the extent practicable, (A) minimize PSC and (B) to the extent PSC cannot be avoided, minimize the mortality of such PSC.

This view of PSC limits appears to conflict with proposals that envision transfer, trading, or rolling-over of residual non-Chinook PSC amounts, between AFA pollock entities or sectors. This is so, because a "sector transfer provision" conceptually suggests that, once a PSC hard cap level is chosen, it may be acceptable for non-Chinook salmon PSC to *achieve* that level of removal. If that interpretation is adopted, then it may also be acceptable to allow sectors that do not remove all of their non-Chinook

salmon PSC allowance to transfer it to other sectors, in order to facilitate continued exploitation of the available pollock resource. Redistributing residual non-Chinook salmon PSC, would, it is asserted, mitigate some portion of the forgone pollock revenues attributable to excessive PSC of non-Chinook salmon by one or another AFA element. This interpretation of what the non-Chinook salmon PSC cap constitutes seemingly reverses the SSC's referenced concept of PSC apportionment. That is, the language of Alternative 2, Component 3, option 1 would, in effect, establish non-Chinook PSC amounts as tradable incidental catch "*allocation*," with commercially negotiable use-privileges to removal (although not conversion to private ownership) of a specific quantity of non-Chinook salmon. This clearly changes the relationship of non-Chinook salmon PSC within the pollock industry, making it just another economic input to production that can be traded, sold, bartered, or withheld in the competitive prosecution of the Bering Sea pollock fishery.

Alternatively, it may be preferable to define a hard cap amount as an upper bound on non-Chinook salmon PSC with the intent to promote actions that minimize non-Chinook salmon PSC under that cap. Such an action might be deemed appropriate in order to promote greater non-Chinook salmon conservation, than afforded under full transferability, up to the overall cap, while still affording some opportunity mitigate impact to the pollock fleet. Under Alternative 2, the suboption to Option 1 of Component 3 provides an opportunity for such measures. The suboption would limit transfers to a) 50 percent, b) 70 percent or c) 90 percent of the non-Chinook salmon that is available to the transferring entity at the time of transfer. Clearly, more non-Chinook salmon would be conserved with the 50 percent transferability than with 70 percent or 90 percent, although far fewer than without transferable allocations, and the reverse is true of mitigation of adverse impacts on pollock fleet gross revenue. Unlike Alternative 2, Alternative 4 does not contain a provision to limit the amount an allocation that can be transferred.

Interestingly, if no transfer provision were recommended under Alternative 2, the CDQ non-Chinook salmon sector level cap would continue to be managed as it is under status quo, with further allocation of the CDQ cap among the six CDQ groups, transferable allocations within the CDQ Program, and a prohibition against a CDQ group exceeding its non-Chinook salmon PSC allocation. In other words, the CDQ groups already have transferable non-Chinook salmon PSC caps and would continue to enjoy that flexibility in the absence of inclusion of transferability options for all sectors.

An important distinction should be made between voluntary transfers and rollovers. Voluntary transfers are industry initiated and fully voluntary. Meaning, the entity that represents a sector that has unused non-Chinook salmon PSC must request the transfer. If that entity does not feel compelled to make a voluntary transfer, or an entity cannot be created or cannot reach consensus among members to make the transfer, then some non-Chinook salmon PSC allocation could be unused and, potentially, some pollock that could otherwise have been harvested if the transfer hade been made would remain unharvested. In contrast, a rollover managed by NMFS is a somewhat automatic reapportionment that is not voluntary and, thus, does not suffer from the risks associated with voluntary transfers.

While this discussion has used terminology more appropriate to hard caps, it is also applicable to the triggered closures of Alternative 3, but in a slightly different way. Under the triggered closure, NMFS would not issue fishery closures once the trigger cap was reached for each sector. Rather, the trigger closures would be managed similar to current management of the trigger closures under the CDQ Program. Each sector would receive a transferable trigger cap allocation, and vessels participating in that sector would be prohibited from fishing inside an area after the sector's trigger cap is reached.

6.10 Managing and Monitoring the Alternatives

The observer and monitoring requirements currently in place to account for Chinook salmon PSC under Amendment 91 also enable NMFS to monitor non-Chinook salmon PSC under a hard cap. Therefore,

NMFS does not anticipate changes to observer requirements or additional monitoring provisions under either Alternative 2 or 3.

If the Council allocates hard caps or trigger caps among sectors and cooperatives, NMFS recommends that any entities receiving allocations be the same as those used for Chinook salmon PSC allocations under Amendment 91. Consistent allocation categories for Chinook and non-Chinook salmon would greatly simplify administrative functions for NMFS and the industry. Existing contracts and application to NMFS establishing these entities could be modified to incorporate the responsibility for receiving and managing non-Chinook salmon PSC allocations.

Area closures could be managed in a number of different ways, depending on the combination of components and options selected. Trigger closures would require a sector to stop pollock fishing in certain closure areas when its allocation of non-Chinook salmon PSC is reached. Depending on the selection of subsequent components in this alternative, salmon may be allocated at the fishery level (CDQ and non-CDQ), to each sector (inshore, mothership, catcher/processor, and CDQ), or among the inshore cooperatives.

Under Alternative 3, participants in the RHS would be exempt from the regulatory closure system. Monitoring and enforcement of this alternative is similar to status quo in which ICA members are managed under the RHS and NMFS closes the trigger area for non-ICA members.

The current census data collection program is highly responsive to management needs and provides timely data, especially considering the logistics of the sectors and variation in operation type. However, even with this highly responsive system, a June and July cap results in a very short time period for NMFS to monitor and insure a timely trigger area closure. NMFS would need to project non-Chinook salmon harvest during the week required to publish a *Federal Register* notice and get census information. These projections may result in a trigger closure being made prior to or after the cap being reached.

If the Council recommends a chum salmon PSC management program under either Alternative 1 or Alternative 3 that provides exemptions to caps or area closures for participants in an approved ICA, NMFS will continue to require that the federal regulations contain sufficient detail to prevent later substantive revisions to the ICA that would reduce its effectiveness.

In addition, NMFS has determined that federal regulations for the RHS may not include specific requirements for the enforcement provisions or penalties that the ICA would impose on its participants. Therefore, in the future, under either Alternative 1 or Alternative 3, the Council could recommend that federal regulations require the RHS ICA to contain a description of the enforcement provisions and penalties that the ICA participants agree to assess on themselves for violation of the ICA provisions. However, the regulations could not include specific requirements for what these penalties must be.

The fishing industry will continue to incur costs associated with the administration of the RHS ICA. However, NMFS has not identified significant costs to the agency for managing or monitoring these alternatives. NMFS Office of Law Enforcement will provide additional information about the costs of enforcing Amendment 91 and the potential costs of the chum salmon PSC alternatives prior to Council final action.

6.11 Assessment of Potential Impact of the Alternatives on Shoreside Value Added Processing

This assessment provides a breakout of the shoreside processing sector revenue (processing value added) by port group. **It is important to recognize that the dollar values in this assessment must not be**

added to the estimated effects on potentially forgone first wholesale gross revenue provided in the RIR for the aggregated shoreside (S) sector. The potential impact values shown here are a subset of the values provided in the RIR and are intended to highlight the potential effects on value added processing by port group.

Confidentiality of data regulations necessitates the creation of two port groups. The two port groups that have been created are the Akutan and Dutch Harbor (AKU/DUT) group, and the "All Others" group. The AKU/DUT group denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors. The All Others group includes King Cove, Kodiak, Sand Point, and several floating processors. These combinations account for all shoreside processing of Bering Sea pollock.

Shown in the tables below are the breakout of ex-vessel and shoreside processing values, as well as their total, and the percent each group-season-year- category represents of the annual total value. These percentages are used to estimate the potential effects on each port group, in each year and season, by multiplying that percentage by estimated effects on the shoreside sector. This method "allocates" effects on each group-season-year, relative to their observed proportion of total first wholesale value. Thus, this is not an accounting of actual effects, but rather is a proportionality-based estimate of where the potential effects may accrue. This has been done, at least in part, to enhance the presentation of economic impact information, while maintaining confidentiality constraints.

Table 6-23 Bering Sea pollock nominal ex-vessel value by season and port group ($millions), 2003-2011.

Season	Port Group	2003	2004	2005	2006	2007	2008	2009	2010	2011
A Season	AKU/DUT	$68	$73	$85	$85	$78	$90	$59	$48	$62
	Others	$4	$5	$7	$6	$6	$5	$3	$3	$4
	Total	**$72**	**$78**	**$91**	**$91**	**$84**	**$95**	**$62**	**$51**	**$66**
B season	AKU/DUT	$82	$75	$88	$92	$78	$99	$75	$64	$94
	Others	$5	$6	$7	$7	$6	$6	$3	$3	$5
	Total	**$87**	**$80**	**$95**	**$98**	**$84**	**$105**	**$78**	**$67**	**$99**
	Grand Total	**$158**	**$159**	**$186**	**$190**	**$168**	**$200**	**$140**	**$118**	**$165**

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2007.

Table 6-24 Bering Sea pollock shoreside processing nominal value added by season and port group ($millions), 2003-2011.

Season	Port Group	2003	2004	2005	2006	2007	2008	2009	2010	2011
A Season	AKU/DUT	$132	$141	$167	$154	$160	$160	$133	$138	$192
	Others	$3	$2	$4	$4	$4	$2	$2	$0	$1
	Total	**$135**	**$142**	**$171**	**$157**	**$165**	**$161**	**$135**	**$138**	**$193**
B season	AKU/DUT	$160	$144	$175	$166	$161	$176	$168	$181	$253
	Others	$3	$2	$4	$4	$5	$2	$3	$1	$1
	Total	**$163**	**$145**	**$179**	**$169**	**$166**	**$178**	**$171**	**$182**	**$254**
	Grand Total	**$297**	**$288**	**$350**	**$326**	**$330**	**$340**	**$306**	**$320**	**$447**

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2007.

Table 6-25 Bering Sea pollock total shoreside sector nominal value (ex-vessel value plus shoreside processing value added ($millions)) by season and port group, 2003-2011

Season	Port Group	2003	2004	2005	2006	2007	2008	2009	2010	2011
A Season	AKU/DUT	$200	$214	$252	$239	$238	$249	$192	$186	$255
	Others	$7	$7	$10	$10	$10	$7	$5	$3	$4
	Total	**$206**	**$221**	**$262**	**$248**	**$249**	**$256**	**$197**	**$189**	**$259**
B season	AKU/DUT	$241	$218	$263	$257	$239	$275	$243	$245	$347
	Others	$8	$7	$11	$10	$10	$8	$6	$4	$6
	Total	**$249**	**$225**	**$274**	**$268**	**$250**	**$283**	**$249**	**$249**	**$353**
	Grand Total	**$456**	**$446**	**$536**	**$516**	**$498**	**$539**	**$446**	**$438**	**$612**

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2007.

Table 6-26 B Season Bering Sea pollock processing nominal value, by port group, as a percent of total B season first wholesale gross revenue, 2003-2011.

Port Group	Season	2003	2004	2005	2006	2007	2008	2009	2010	2011
AKU/DUT	B	96.8%	96.8%	96.1%	96.1%	95.9%	97.3%	97.6%	98.4%	98.4%
All Others	B	3.2%	3.2%	3.9%	3.9%	4.1%	2.7%	2.4%	1.6%	1.6%

Sources: Terry Hiatt: Alaska Fisheries Science Center, from data compiled for the Economic Status and Fishery Evaluation Report, 2007.

As shown in Table 6-27 through
Table 6-29, the effect of hard cap allocation scenarios and cap levels on shoreside value added in dollars, percent of B season total gross revenue, and in percent of annual total gross revenue, repectively. The estimates are provided for the port groupings of Akutan/Dutch Harbor and for all others combined. Recall that these values are a subset of the shoreside total potential forgone pollock revenue from the CV sector. In the worst cases, potentially forgone shoreside value added revenue exceeds $161 million, or approximately 97 percent of B season total gross revenue and approximately 48 percent of total annual goross revenue. The vast majority of the potential impact is attributable to the Akutan and Dutch Harbor area. As these numbers are a subset of the CV impact numbers presented previously under the impact anlsysis of Alternative 2, they vary similarly with decreasing impact as the cap is increased, but greater effect on the CV, and thus shoreside, sector under allocation scenario 3.

Table 6-27 Hypothetical potentially forgone ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 2, Option 1a ($ Millions) 2003-2011.

2ii (sector allocation 1)														
Cap:	50,000				Cap:	200,000				Cap:	353,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$40.48	$78.97	$2.43	$1.54	2003					2003				
2004	$39.38	$75.91	$2.92	$0.86	2004	$17.66	$34.05	$1.31	$0.39	2004	$7.16	$13.80	$0.53	$0.16
2005	$67.47	$133.62	$5.19	$3.03	2005	$57.60	$114.09	$4.43	$2.59	2005	$45.31	$89.74	$3.49	$2.04
2006	$86.21	$155.54	$6.17	$3.57	2006	$57.54	$103.82	$4.12	$2.38	2006				
2007	$19.32	$39.75	$1.44	$1.11	2007					2007				
2008					2008					2008				
2009					2009					2009				
2010					2010					2010				
2011	$59.15	$159.19	$3.03	$0.55	2011					2011				

4ii (sector allocation 2)														
Cap:	50,000				Cap:	200,000				Cap:	353,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$45.72	$89.19	$2.75	$1.74	2003	$5.89	$11.49	$0.35	$0.22	2003				
2004	$40.33	$77.73	$2.99	$0.88	2004	$18.73	$36.10	$1.39	$0.41	2004	$13.25	$25.55	$0.98	$0.29
2005	$68.49	$135.66	$5.27	$3.08	2005	$59.76	$118.35	$4.60	$2.69	2005	$53.80	$106.56	$4.14	$2.42
2006	$86.21	$155.54	$6.17	$3.57	2006	$69.67	$125.70	$4.99	$2.89	2006	$48.34	$87.20	$3.46	$2.00
2007	$24.72	$50.86	$1.84	$1.42	2007					2007				
2008					2008					2008				
2009	$4.86	$10.88	$0.21	$0.17	2009					2009				
2010					2010					2010				
2011	$67.63	$182.02	$3.47	$0.63	2011					2011				
6 (sector allocation 3)														
Cap:	50,000				Cap:	200,000				Cap:	353,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$51.60	$100.67	$3.10	$1.97	2003	$14.41	$28.12	$0.87	$0.55	2003				
2004	$44.59	$85.95	$3.30	$0.98	2004	$30.08	$57.98	$2.23	$0.66	2004	$17.66	$34.05	$1.31	$0.39
2005	$72.43	$143.46	$5.58	$3.26	2005	$65.83	$130.38	$5.07	$2.96	2005	$57.69	$114.27	$4.44	$2.59
2006	$89.47	$161.41	$6.40	$3.71	2006	$78.64	$141.88	$5.63	$3.26	2006	$58.36	$105.29	$4.18	$2.42
2007	$28.64	$58.92	$2.13	$1.65	2007					2007				
2008					2008					2008				
2009	$23.17	$51.88	$1.01	$0.82	2009					2009				
2010					2010					2010				
2011	$76.15	$204.95	$3.90	$0.71	2011	$19.25	$51.82	$0.99	$0.18	2011				

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-28 Hypothetical potentially forgone ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 2, Option 1a, in percent of B season sector revenue, 2003-2011.

2ii (sector allocation 1)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	46.7%	48.6%	2.8%	0.9%	2003					2003				
2004	49.2%	52.2%	3.6%	0.6%	2004	22.1%	23.4%	1.6%	0.3%	2004	8.9%	9.5%	0.7%	0.1%
2005	71.1%	74.8%	5.5%	1.7%	2005	60.7%	63.9%	4.7%	1.5%	2005	47.7%	50.2%	3.7%	1.1%
2006	87.6%	91.8%	6.3%	2.1%	2006	58.5%	61.3%	4.2%	1.4%	2006				
2007	23.0%	24.0%	1.7%	0.7%	2007					2007				
2008					2008					2008				
2009					2009					2009				
2010					2010					2010				
2011	59.9%	62.7%	3.1%	0.2%	2011					2011				
4ii (sector allocation 2)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	52.7%	54.8%	3.2%	1.1%	2003	6.8%	7.1%	0.4%	0.1%	2003				
2004	50.4%	53.5%	3.7%	0.6%	2004	23.4%	24.8%	1.7%	0.3%	2004	16.6%	17.6%	1.2%	0.2%
2005	72.1%	76.0%	5.6%	1.7%	2005	62.9%	66.3%	4.8%	1.5%	2005	56.7%	59.7%	4.4%	1.4%
2006	87.6%	91.8%	6.3%	2.1%	2006	70.8%	74.2%	5.1%	1.7%	2006	49.1%	51.5%	3.5%	1.2%
2007	29.4%	30.7%	2.2%	0.9%	2007					2007				
2008					2008					2008				
2009	6.2%	6.4%	0.3%	0.1%	2009					2009				
2010					2010					2010				
2011	68.5%	71.7%	3.5%	0.2%	2011					2011				
6 (sector allocation 3)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	59.5%	61.9%	3.6%	1.2%	2003	16.6%	17.3%	1.0%	0.3%	2003				
2004	55.7%	59.1%	4.1%	0.7%	2004	37.6%	39.9%	2.8%	0.5%	2004	22.1%	23.4%	1.6%	0.3%
2005	76.3%	80.3%	5.9%	1.8%	2005	69.3%	73.0%	5.3%	1.7%	2005	60.8%	64.0%	4.7%	1.5%
2006	90.8%	95.2%	6.5%	2.2%	2006	79.8%	83.6%	5.7%	1.9%	2006	59.3%	62.1%	4.2%	1.4%
2007	34.0%	35.6%	2.5%	1.0%	2007					2007				
2008					2008					2008				
2009	29.6%	30.4%	1.3%	0.5%	2009					2009				
2010					2010					2010				
2011	77.1%	80.8%	4.0%	0.3%	2011	19.5%	20.4%	1.0%	0.1%	2011				

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-29 Hypothetical potentially forgone ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 2, Option 1a, in percent of total annual sector revenue, 2003-2011.\

2ii (sector allocation 1)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	25.5%	26.6%	0.8%	0.5%	2003					2003				
2004	24.8%	26.4%	1.0%	0.3%	2004	11.1%	11.8%	0.8%	0.1%	2004	4.5%	4.8%	0.3%	0.1%
2005	36.3%	38.2%	1.5%	0.9%	2005	31.0%	32.6%	2.4%	0.7%	2005	24.4%	25.6%	1.9%	0.6%
2006	45.4%	47.6%	1.9%	1.1%	2006	30.3%	31.8%	2.2%	0.7%	2006				
2007	11.5%	12.0%	0.4%	0.3%	2007					2007				
2008					2008					2008				
2009					2009					2009				
2010					2010					2010				
2011	35.9%	35.6%	0.7%	0.1%	2011					2011				
4ii (sector allocation 2)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	28.9%	30.0%	1.7%	0.6%	2003	3.7%	3.9%	0.2%	0.1%	2003				
2004	25.4%	27.0%	1.9%	0.3%	2004	11.8%	12.5%	0.9%	0.1%	2004	8.4%	8.9%	0.6%	0.1%
2005	36.8%	38.8%	2.8%	0.9%	2005	32.1%	33.8%	2.5%	0.8%	2005	28.9%	30.5%	2.2%	0.7%
2006	45.4%	47.6%	3.3%	1.1%	2006	36.7%	38.5%	2.6%	0.9%	2006	25.5%	26.7%	1.8%	0.6%
2007	14.7%	15.4%	1.1%	0.4%	2007					2007				
2008					2008					2008				
2009	3.5%	3.6%	0.2%	0.1%	2009					2009				
2010					2010					2010				
2011	41.0%	40.8%	2.1%	0.1%	2011					2011				
6 (sector allocation 3)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	32.6%	33.9%	2.0%	0.7%	2003	9.1%	9.5%	0.5%	0.2%	2003				
2004	28.1%	29.9%	2.1%	0.3%	2004	19.0%	20.2%	1.4%	0.2%	2004	11.1%	11.8%	0.8%	0.1%
2005	38.9%	41.0%	3.0%	0.9%	2005	35.4%	37.3%	2.7%	0.8%	2005	31.0%	32.7%	2.4%	0.7%
2006	47.1%	49.4%	3.4%	1.1%	2006	41.4%	43.4%	3.0%	1.0%	2006	30.7%	32.2%	2.2%	0.7%
2007	17.1%	17.8%	1.3%	0.5%	2007					2007				
2008					2008					2008				
2009	16.5%	17.0%	0.7%	0.3%	2009					2009				
2010					2010					2010				
2011	46.2%	45.9%	2.4%	0.2%	2011	11.7%	11.6%	0.6%	0.0%	2011				

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-30 Hypothetical potentially forgone ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 2, Option 1b ($ Millions) 2003-2011.

2ii (sector allocation 1)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$40.48	$78.97	$2.43	$1.54	2003					2003				
2004					2004					2004				
2005	$26.73	$52.94	$2.06	$1.20	2005	$18.87	$37.38	$1.45	$0.85	2005	$17.47	$34.59	$1.34	$0.79
2006	$35.85	$64.68	$2.57	$1.49	2006	$27.57	$49.73	$1.97	$1.14	2006	$25.04	$45.17	$1.79	$1.04
2007					2007					2007				
2008					2008					2008				
2009	$1.34	$3.01	$0.06	$0.05	2009					2009				
2010					2010					2010				
2011	$43.35	$116.67	$2.22	$0.40	2011	$12.86	$34.60	$0.66	$0.12	2011				
4ii (sector allocation 2)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$4.90	$9.56	$0.29	$0.19	2003					2003				
2004	$1.11	$2.15	$0.08	$0.02	2004					2004				
2005	$30.11	$59.64	$2.32	$1.35	2005	$19.10	$37.83	$1.47	$0.86	2005	$17.47	$34.59	$1.34	$0.79
2006	$35.85	$64.68	$2.57	$1.49	2006	$32.60	$58.82	$2.33	$1.35	2006	$25.04	$45.17	$1.79	$1.04
2007	$1.81	$3.72	$0.13	$0.10	2007					2007				
2008					2008					2008				
2009	$8.09	$18.11	$0.35	$0.29	2009					2009				
2010					2010					2010				
2011	$86.86	$233.77	$4.45	$0.81	2011	$60.18	$161.98	$3.09	$0.56	2011	$31.71	$85.35	$1.63	$0.30
6 (sector allocation 3)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$10.32	$20.14	$0.62	$0.39	2003					2003				
2004	$3.57	$6.87	$0.26	$0.08	2004					2004				
2005	$32.46	$64.29	$2.50	$1.46	2005	$21.80	$43.18	$1.68	$0.98	2005	$18.87	$37.38	$1.45	$0.85
2006	$35.85	$64.68	$2.57	$1.49	2006	$35.85	$64.68	$2.57	$1.49	2006	$27.57	$49.73	$1.97	$1.14
2007	$5.50	$11.32	$0.41	$0.32	2007					2007				
2008					2008					2008				
2009	$20.08	$44.96	$0.88	$0.71	2009					2009				
2010					2010					2010				
2011	$88.67	$238.65	$4.55	$0.83	2011	$70.16	$188.84	$3.60	$0.65	2011	$54.36	$146.29	$2.79	$0.51

Table 6-31 Hypothetical potentially forgone ex-vessel nominal revenue and shoreside value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 2, Option 1b, in percent of B season sector revenue, 2003-2011.

2ii (sector allocation 1)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	46.7%	48.6%	2.8%	0.9%	2003					2003				
2004					2004					2004				
2005	28.2%	29.6%	2.2%	0.7%	2005	19.9%	20.9%	1.5%	0.5%	2005	18.4%	19.4%	1.4%	0.4%
2006	36.4%	38.2%	2.6%	0.9%	2006	28.0%	29.4%	2.0%	0.7%	2006	25.5%	26.7%	1.8%	0.6%
2007					2007					2007				
2008					2008					2008				
2009	1.7%	1.8%	0.1%	0.0%	2009					2009				
2010					2010					2010				
2011	43.9%	46.0%	2.3%	0.2%	2011	13.0%	13.6%	0.7%	0.0%	2011				
4ii (sector allocation 2)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	5.7%	5.9%	0.3%	0.1%	2003					2003				
2004	1.4%	1.5%	0.1%	0.0%	2004					2004				
2005	31.7%	33.4%	2.4%	0.8%	2005	20.1%	21.2%	1.5%	0.5%	2005	18.4%	19.4%	1.4%	0.4%
2006	36.4%	38.2%	2.6%	0.9%	2006	33.1%	34.7%	2.4%	0.8%	2006	25.5%	26.7%	1.8%	0.6%
2007	2.1%	2.2%	0.2%	0.1%	2007					2007				
2008					2008					2008				
2009	10.3%	10.6%	0.5%	0.2%	2009					2009				
2010					2010					2010				
2011	87.9%	92.1%	4.5%	0.3%	2011	60.9%	63.8%	3.1%	0.2%	2011	32.1%	33.6%	1.6%	0.1%
6 (sector allocation 3)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	11.9%	12.4%	0.7%	0.2%	2003					2003				
2004	4.5%	4.7%	0.3%	0.1%	2004					2004				
2005	34.2%	36.0%	2.6%	0.8%	2005	23.0%	24.2%	1.8%	0.5%	2005	19.9%	20.9%	1.5%	0.5%
2006	36.4%	38.2%	2.6%	0.9%	2006	36.4%	38.2%	2.6%	0.9%	2006	28.0%	29.4%	2.0%	0.7%
2007	6.5%	6.8%	0.5%	0.2%	2007					2007				
2008					2008					2008				
2009	25.6%	26.3%	1.1%	0.4%	2009					2009				
2010					2010					2010				
2011	89.8%	94.1%	4.6%	0.3%	2011	71.0%	74.4%	3.6%	0.3%	2011	55.0%	57.7%	2.8%	0.2%

Table 6-32 Hypothetical potentially forgone ex-vessel revenue and shoreside nominal value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 2, Option 1b, in percent of total annual sector revenue, 2003-2011.

2ii (sector allocation 1)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	25.5%	26.6%	0.8%	0.5%	2003					2003				
2004					2003					2004				
2005	14.4%	15.1%	0.6%	0.3%	2003	10.1%	10.7%	0.8%	0.2%	2005	9.4%	9.9%	0.7%	0.2%
2006	18.9%	19.8%	0.8%	0.5%	2003	14.5%	15.2%	1.0%	0.3%	2006	13.2%	13.8%	0.9%	0.3%
2007					2003					2007				
2008					2003					2008				
2009	1.0%	1.0%	0.0%	0.0%	2003					2009				
2010					2003					2010				
2011	26.3%	26.1%	0.5%	0.1%	2003	7.8%	7.7%	0.4%	0.0%	2011				
4ii (sector allocation 2)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	3.1%	3.2%	0.2%	0.1%	2003					2003				
2004	0.7%	0.7%	0.1%	0.0%	2004					2004				
2005	16.2%	17.0%	1.2%	0.4%	2005	10.3%	10.8%	0.8%	0.2%	2005	9.4%	9.9%	0.7%	0.2%
2006	18.9%	19.8%	1.4%	0.5%	2006	17.2%	18.0%	1.2%	0.4%	2006	13.2%	13.8%	0.9%	0.3%
2007	1.1%	1.1%	0.1%	0.0%	2007					2007				
2008					2008					2008				
2009	5.8%	5.9%	0.3%	0.1%	2009					2009				
2010					2010					2010				
2011	52.7%	52.3%	2.7%	0.2%	2011	36.5%	36.3%	1.9%	0.1%	2011	19.2%	19.1%	1.0%	0.1%
6 (sector allocation 3)														
Cap:	**50,000**				**Cap:**	**200,000**				**Cap:**	**353,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	6.5%	6.8%	0.4%	0.1%	2003					2003				
2004	2.2%	2.4%	0.2%	0.0%	2004					2004				
2005	17.4%	18.4%	1.3%	0.4%	2005	11.7%	12.3%	0.9%	0.3%	2005	10.1%	10.7%	0.8%	0.2%
2006	18.9%	19.8%	1.4%	0.5%	2006	18.9%	19.8%	1.4%	0.5%	2006	14.5%	15.2%	1.0%	0.3%
2007	3.3%	3.4%	0.2%	0.1%	2007					2007				
2008					2008					2008				
2009	14.3%	14.7%	0.6%	0.2%	2009					2009				
2010					2010					2010				
2011	53.8%	53.4%	2.8%	0.2%	2011	42.5%	42.3%	2.2%	0.1%	2011	33.0%	32.8%	1.7%	0.1%

Table 6-33 through Table 6-44 shoreside value added under Alternative 3 in dollars, percent of B season total gross revenue, and in percent of annual total gross revenue, for each of the Alternatgive 3 options. The estimates are provided for the port groupings of Akutan/Dutch Harbor and for all others combined. Recall that these values are a subset of the shoreside total potential forgone pollock revenue from the CV sector. In the worst cases, potentially forgone shoreside value added revenue exceeds $119 million, or approximately 67 percent of B season total gross revenue and approximately 34 percent of total annual goross revenue. The vast majority of the potential impact is attributable to the Akutan and Dutch Harbor area. As these numbers are a subset of the CV impact numbers presented previously under the impacta anlsysis of Alternative 3, they vary similarly with decreasing impact as the trigger cap is increased, but greater effect on the CV, and thus shoreside, sector under allocation scenario 3. In the tables that follow, estimates are provided for each of options of Alternative 3.

Table 6-33 Hypothetical "at risk" ex-vessel nominal revenue and and shoreside nominal value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 3, Option 1a ($ Millions), 2003-2011.

2ii (sector allocation 1) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$47.39	$92.45	$2.85	$1.81	2003	$21.66	$42.26	$1.30	$0.83	2003				
2004	$40.24	$77.56	$2.98	$0.88	2004	$30.18	$58.17	$2.24	$0.66	2004	$13.83	$26.66	$1.03	$0.30
2005	$54.11	$107.16	$4.16	$2.43	2005	$48.26	$95.58	$3.71	$2.17	2005	$40.95	$81.10	$3.15	$1.84
2006	$47.92	$86.46	$3.43	$1.99	2006	$38.65	$69.73	$2.77	$1.60	2006	$26.28	$47.42	$1.88	$1.09
2007	$20.55	$42.28	$1.53	$1.18	2007					2007				
2008					2008					2008				
2009	$8.79	$19.68	$0.38	$0.31	2009					2009				
2010					2010					2010				
2011	$52.14	$140.34	$2.67	$0.49	2011	$30.96	$83.32	$1.59	$0.29	2011				

4ii (sector allocation 2) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$47.39	$92.45	$2.85	$1.81	2003	$32.49	$63.40	$1.95	$1.24	2003	$5.42	$10.57	$0.33	$0.21
2004	$40.24	$77.56	$2.98	$0.88	2004	$31.44	$60.59	$2.33	$0.69	2004	$15.09	$29.09	$1.12	$0.33
2005	$55.57	$110.06	$4.28	$2.50	2005	$49.72	$98.47	$3.83	$2.24	2005	$42.41	$83.99	$3.26	$1.91
2006	$47.92	$86.46	$3.43	$1.99	2006	$40.20	$72.52	$2.88	$1.67	2006	$30.92	$55.78	$2.21	$1.28
2007	$21.92	$45.10	$1.63	$1.26	2007	$13.70	$28.19	$1.02	$0.79	2007				
2008					2008					2008				
2009	$8.79	$19.68	$0.38	$0.31	2009					2009				
2010					2010					2010				
2011	$57.03	$153.49	$2.92	$0.53	2011	$42.37	$114.02	$2.17	$0.39	2011				

6 (sector allocation 3) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$51.45	$100.38	$3.09	$1.96	2003	$41.97	$81.89	$2.52	$1.60	2003	$12.19	$23.77	$0.73	$0.46
2004	$40.24	$77.56	$2.98	$0.88	2004	$35.21	$67.87	$2.61	$0.77	2004	$26.41	$50.90	$1.96	$0.58
2005	$59.96	$118.75	$4.62	$2.70	2005	$49.72	$98.47	$3.83	$2.24	2005	$48.26	$95.58	$3.71	$2.17
2006	$47.92	$86.46	$3.43	$1.99	2006	$44.83	$80.89	$3.21	$1.86	2006	$38.65	$69.73	$2.77	$1.60
2007	$23.29	$47.92	$1.73	$1.34	2007	$17.81	$36.65	$1.32	$1.03	2007				
2008	$5.01	$8.90	$0.28	$0.10	2008					2008				
2009	$8.79	$19.68	$0.38	$0.31	2009	$3.77	$8.43	$0.16	$0.13	2009				
2010					2010					2010				
2011	$58.66	$157.88	$3.01	$0.55	2011	$45.63	$122.79	$2.34	$0.42	2011	$17.92	$48.24	$0.92	$0.17

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-34 Hypothetical "at risk"ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale revenue by year, season, and aggregated port group under Alternative 3, Option 1a, in percent of B season sector revenue, 2003-2009).

2ii (sector allocation 1) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	54.7%	56.8%	3.3%	1.1%	2003	25.0%	26.0%	1.5%	0.5%	2003				
2004	50.3%	53.4%	3.7%	0.6%	2004	37.7%	40.0%	2.8%	0.5%	2004	17.3%	18.3%	1.3%	0.2%
2005	57.0%	60.0%	4.4%	1.4%	2005	50.8%	53.5%	3.9%	1.2%	2005	43.1%	45.4%	3.3%	1.0%
2006	48.7%	51.0%	3.5%	1.2%	2006	39.3%	41.2%	2.8%	0.9%	2006	26.7%	28.0%	1.9%	0.6%
2007	24.4%	25.5%	1.8%	0.7%	2007					2007				
2008					2008					2008				
2009	11.2%	11.5%	0.5%	0.2%	2009					2009				
2010					2010					2010				
2011	52.8%	55.3%	2.7%	0.2%	2011	31.3%	32.8%	1.6%	0.1%	2011				

4ii (sector allocation 2) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	54.7%	56.8%	3.3%	1.1%	2003	37.5%	39.0%	2.3%	0.8%	2003	6.2%	6.5%	0.4%	0.1%
2004	50.3%	53.4%	3.7%	0.6%	2004	39.3%	41.7%	2.9%	0.5%	2004	18.8%	20.0%	1.4%	0.2%
2005	58.5%	61.6%	4.5%	1.4%	2005	52.4%	55.1%	4.0%	1.3%	2005	44.7%	47.0%	3.4%	1.1%
2006	48.7%	51.0%	3.5%	1.2%	2006	40.9%	42.8%	2.9%	1.0%	2006	31.4%	32.9%	2.2%	0.8%
2007	26.1%	27.2%	1.9%	0.8%	2007	16.3%	17.0%	1.2%	0.5%	2007				
2008					2008					2008				
2009	11.2%	11.5%	0.5%	0.2%	2009					2009				
2010					2010					2010				
2011	57.7%	60.5%	3.0%	0.2%	2011	42.9%	44.9%	2.2%	0.2%	2011				

6 (sector allocation 3) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	59.4%	61.7%	3.6%	1.2%	2003	48.4%	50.4%	2.9%	1.0%	2003	14.1%	14.6%	0.8%	0.3%
2004	50.3%	53.4%	3.7%	0.6%	2004	44.0%	46.7%	3.3%	0.5%	2004	33.0%	35.0%	2.4%	0.4%
2005	63.1%	66.5%	4.9%	1.5%	2005	52.4%	55.1%	4.0%	1.3%	2005	50.8%	53.5%	3.9%	1.2%
2006	48.7%	51.0%	3.5%	1.2%	2006	45.6%	47.7%	3.3%	1.1%	2006	39.3%	41.2%	2.8%	0.9%
2007	27.7%	29.0%	2.1%	0.8%	2007	21.2%	22.1%	1.6%	0.6%	2007				
2008	4.8%	5.0%	0.3%	0.1%	2008					2008				
2009	11.2%	11.5%	0.5%	0.2%	2009	4.8%	4.9%	0.2%	0.1%	2009				
2010					2010					2010				
2011	59.4%	62.2%	3.0%	0.2%	2011	46.2%	48.4%	2.4%	0.2%	2011	18.1%	19.0%	0.9%	0.1%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-35 Hypothetical "at risk" ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3, Option 1a, in percent of total annual sector revenue, 2003-2011.

2ii (sector allocation 1) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	29.9%	31.1%	1.0%	0.6%	2003	13.7%	14.2%	0.8%	0.3%	2003				
2004	25.4%	27.0%	1.0%	0.3%	2003	19.0%	20.2%	1.4%	0.2%	2004	8.7%	9.3%	0.6%	0.1%
2005	29.1%	30.6%	1.2%	0.7%	2003	25.9%	27.3%	2.0%	0.6%	2005	22.0%	23.2%	1.7%	0.5%
2006	25.3%	26.5%	1.1%	0.6%	2003	20.4%	21.4%	1.5%	0.5%	2006	13.9%	14.5%	1.0%	0.3%
2007	12.2%	12.8%	0.5%	0.4%	2003					2007				
2008					2003					2008				
2009	6.3%	6.4%	0.1%	0.1%	2003					2009				
2010					2003					2010				
2011	31.6%	31.4%	0.6%	0.1%	2003	18.8%	18.7%	1.0%	0.1%	2011				

4ii (sector allocation 2) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	29.9%	31.1%	1.8%	0.6%	2003	20.5%	21.3%	1.2%	0.4%	2003	3.4%	3.6%	0.2%	0.1%
2004	25.4%	27.0%	1.9%	0.3%	2004	19.8%	21.1%	1.5%	0.2%	2004	9.5%	10.1%	0.7%	0.1%
2005	29.9%	31.5%	2.3%	0.7%	2005	26.7%	28.1%	2.1%	0.6%	2005	22.8%	24.0%	1.8%	0.5%
2006	25.3%	26.5%	1.8%	0.6%	2006	21.2%	22.2%	1.5%	0.5%	2006	16.3%	17.1%	1.2%	0.4%
2007	13.1%	13.7%	1.0%	0.4%	2007	8.2%	8.5%	0.6%	0.2%	2007				
2008					2008					2008				
2009	6.3%	6.4%	0.3%	0.1%	2009					2009				
2010					2010					2010				
2011	34.6%	34.4%	1.8%	0.1%	2011	25.7%	25.5%	1.3%	0.1%	2011				

6 (sector allocation 3) Option 1a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	32.5%	33.8%	2.0%	0.7%	2003	26.5%	27.5%	1.6%	0.5%	2003	7.7%	8.0%	0.5%	0.2%
2004	25.4%	27.0%	1.9%	0.3%	2004	22.2%	23.6%	1.6%	0.3%	2004	16.7%	17.7%	1.2%	0.2%
2005	32.2%	33.9%	2.5%	0.8%	2005	26.7%	28.1%	2.1%	0.6%	2005	25.9%	27.3%	2.0%	0.6%
2006	25.3%	26.5%	1.8%	0.6%	2006	23.7%	24.8%	1.7%	0.6%	2006	20.4%	21.4%	1.5%	0.5%
2007	13.9%	14.5%	1.0%	0.4%	2007	10.6%	11.1%	0.8%	0.3%	2007				
2008	2.5%	2.6%	0.1%	0.0%	2008					2008				
2009	6.3%	6.4%	0.3%	0.1%	2009	2.7%	2.8%	0.1%	0.0%	2009				
2010					2010					2010				
2011	35.6%	35.4%	1.8%	0.1%	2011	27.7%	27.5%	1.4%	0.1%	2011	10.9%	10.8%	0.6%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-36 Hypothetical "at risk" ex-vessel nominal reveue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3, Option 1b ($ Millions), 2003-2011.

2ii (sector allocation 1) Option 1b.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$5.14	$10.03	$0.31	$0.20	2003					2003				
2004	$2.32	$4.48	$0.17	$0.05	2004					2004				
2005	$27.57	$54.60	$2.12	$1.24	2005	$20.29	$40.18	$1.56	$0.91	2005	$15.49	$30.68	$1.19	$0.70
2006	$21.62	$39.01	$1.55	$0.90	2006	$21.62	$39.01	$1.55	$0.90	2006	$14.61	$26.36	$1.05	$0.61
2007	$1.71	$3.52	$0.13	$0.10	2007					2007				
2008					2008					2008				
2009	$4.47	$10.00	$0.19	$0.16	2009	$0.47	$1.06	$0.02	$0.02	2009				
2010					2010					2010				
2011	$27.00	$72.67	$1.38	$0.25	2011	$19.83	$53.36	$1.02	$0.18	2011	$6.08	$16.36	$0.31	$0.06

4ii (sector allocation 2) Option 1b.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$7.41	$14.45	$0.45	$0.28	2003					2003				
2004	$6.49	$12.50	$0.48	$0.14	2004					2004				
2005	$27.57	$54.60	$2.12	$1.24	2005	$21.84	$43.26	$1.68	$0.98	2005	$15.64	$30.98	$1.20	$0.70
2006	$23.03	$41.55	$1.65	$0.95	2006	$21.62	$39.01	$1.55	$0.90	2006	$18.37	$33.14	$1.31	$0.76
2007	$2.83	$5.83	$0.21	$0.16	2007					2007				
2008	$0.59	$1.04	$0.03	$0.01	2008					2008				
2009	$4.77	$10.67	$0.21	$0.17	2009	$0.63	$1.40	$0.03	$0.02	2009				
2010	$1.59	$4.53	$0.09	$0.02	2010					2010				
2011	$27.00	$72.67	$1.38	$0.25	2011	$20.90	$56.25	$1.07	$0.19	2011	$8.91	$23.97	$0.46	$0.08

6 (sector allocation 3) Option 1b.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	$10.10	$19.71	$0.61	$0.38	2003	$2.87	$5.60	$0.17	$0.11	2003				
2004	$9.80	$18.88	$0.73	$0.21	2004	$0.95	$1.83	$0.07	$0.02	2004				
2005	$30.50	$60.42	$2.35	$1.37	2005	$25.22	$49.95	$1.94	$1.13	2005	$16.99	$33.65	$1.31	$0.76
2006	$23.03	$41.55	$1.65	$0.95	2006	$21.62	$39.01	$1.55	$0.90	2006	$21.62	$39.01	$1.55	$0.90
2007	$4.68	$9.63	$0.35	$0.27	2007	$0.40	$0.83	$0.03	$0.02	2007				
2008	$3.75	$6.65	$0.21	$0.08	2008					2008				
2009	$7.90	$17.69	$0.34	$0.28	2009	$1.55	$3.47	$0.07	$0.06	2009				
2010	$3.81	$10.85	$0.21	$0.04	2010					2010				
2011	$27.00	$72.67	$1.38	$0.25	2011	$25.19	$67.79	$1.29	$0.23	2011	$13.07	$35.18	$0.67	$0.12

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-37 Hypothetical "at risk" ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 1b, in percent of B season sector revenue, 2003-2011.

2ii (sector allocation 1) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	5.9%	6.2%	0.4%	0.1%	2003					2003				
2004	2.9%	3.1%	0.2%	0.0%	2004					2004				
2005	29.0%	30.6%	2.2%	0.7%	2005	21.4%	22.5%	1.6%	0.5%	2005	16.3%	17.2%	1.3%	0.4%
2006	22.0%	23.0%	1.6%	0.5%	2006	22.0%	23.0%	1.6%	0.5%	2006	14.9%	15.6%	1.1%	0.4%
2007	2.0%	2.1%	0.2%	0.1%	2007					2007				
2008					2008					2008				
2009	5.7%	5.9%	0.2%	0.1%	2009	0.6%	0.6%	0.0%	0.0%	2009				
2010					2010					2010				
2011	27.3%	28.6%	1.4%	0.1%	2011	20.1%	21.0%	1.0%	0.1%	2011	6.2%	6.4%	0.3%	0.0%
4ii (sector allocation 2) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	8.5%	8.9%	0.5%	0.2%	2003					2003				
2004	8.1%	8.6%	0.6%	0.1%	2004					2004				
2005	29.0%	30.6%	2.2%	0.7%	2005	23.0%	24.2%	1.8%	0.5%	2005	16.5%	17.3%	1.3%	0.4%
2006	23.4%	24.5%	1.7%	0.6%	2006	22.0%	23.0%	1.6%	0.5%	2006	18.7%	19.6%	1.3%	0.4%
2007	3.4%	3.5%	0.3%	0.1%	2007					2007				
2008	0.6%	0.6%	0.0%	0.0%	2008					2008				
2009	6.1%	6.3%	0.3%	0.1%	2009	0.8%	0.8%	0.0%	0.0%	2009				
2010	2.4%	2.5%	0.1%	0.0%	2010					2010				
2011	27.3%	28.6%	1.4%	0.1%	2011	21.2%	22.2%	1.1%	0.1%	2011	9.0%	9.4%	0.5%	0.0%
6 (sector allocation 3) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	11.7%	12.1%	0.7%	0.2%	2003	3.3%	3.4%	0.2%	0.1%	2003				
2004	12.2%	13.0%	0.9%	0.1%	2004	1.2%	1.3%	0.1%	0.0%	2004				
2005	32.1%	33.8%	2.5%	0.8%	2005	26.6%	28.0%	2.0%	0.6%	2005	17.9%	18.8%	1.4%	0.4%
2006	23.4%	24.5%	1.7%	0.6%	2006	22.0%	23.0%	1.6%	0.5%	2006	22.0%	23.0%	1.6%	0.5%
2007	5.6%	5.8%	0.4%	0.2%	2007	0.5%	0.5%	0.0%	0.0%	2007				
2008	3.6%	3.7%	0.2%	0.0%	2008					2008				
2009	10.1%	10.4%	0.4%	0.2%	2009	2.0%	2.0%	0.1%	0.0%	2009				
2010	5.7%	6.0%	0.3%	0.0%	2010					2010				
2011	27.3%	28.6%	1.4%	0.1%	2011	25.5%	26.7%	1.3%	0.1%	2011	13.2%	13.9%	0.7%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-38 Hypothetical "at risk" ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 1b, in percent of total annual sector revenue, 2003-2011.

2ii (sector allocation 1) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	3.2%	3.4%	0.1%	0.1%	2003					2003				
2004	1.5%	1.6%	0.1%	0.0%	2003					2004				
2005	14.8%	15.6%	0.6%	0.4%	2003	10.9%	11.5%	0.8%	0.3%	2005	8.3%	8.8%	0.6%	0.2%
2006	11.4%	11.9%	0.5%	0.3%	2003	11.4%	11.9%	0.8%	0.3%	2006	7.7%	8.1%	0.6%	0.2%
2007	1.0%	1.1%	0.0%	0.0%	2003					2007				
2008					2003					2008				
2009	3.2%	3.3%	0.1%	0.1%	2003	0.3%	0.3%	0.0%	0.0%	2009				
2010					2003					2010				
2011	16.4%	16.3%	0.3%	0.1%	2003	12.0%	11.9%	0.6%	0.0%	2011	3.7%	3.7%	0.2%	0.0%
4ii (sector allocation 2) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	4.7%	4.9%	0.3%	0.1%	2003					2003				
2004	4.1%	4.3%	0.3%	0.0%	2004					2004				
2005	14.8%	15.6%	1.1%	0.4%	2005	11.7%	12.4%	0.9%	0.3%	2005	8.4%	8.9%	0.6%	0.2%
2006	12.1%	12.7%	0.9%	0.3%	2006	11.4%	11.9%	0.8%	0.3%	2006	9.7%	10.2%	0.7%	0.2%
2007	1.7%	1.8%	0.1%	0.0%	2007					2007				
2008	0.3%	0.3%	0.0%	0.0%	2008					2008				
2009	3.4%	3.5%	0.1%	0.1%	2009	0.4%	0.5%	0.0%	0.0%	2009				
2010	1.3%	1.4%	0.1%	0.0%	2010					2010				
2011	16.4%	16.3%	0.8%	0.1%	2011	12.7%	12.6%	0.6%	0.0%	2011	5.4%	5.4%	0.3%	0.0%
6 (sector allocation 3) Option 1b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	6.4%	6.6%	0.4%	0.1%	2003	1.8%	1.9%	0.1%	0.0%	2003				
2004	6.2%	6.6%	0.5%	0.1%	2004	0.6%	0.6%	0.0%	0.0%	2004				
2005	16.4%	17.3%	1.3%	0.4%	2005	13.6%	14.3%	1.0%	0.3%	2005	9.1%	9.6%	0.7%	0.2%
2006	12.1%	12.7%	0.9%	0.3%	2006	11.4%	11.9%	0.8%	0.3%	2006	11.4%	11.9%	0.8%	0.3%
2007	2.8%	2.9%	0.2%	0.1%	2007	0.2%	0.3%	0.0%	0.0%	2007				
2008	1.9%	2.0%	0.1%	0.0%	2008					2008				
2009	5.6%	5.8%	0.2%	0.1%	2009	1.1%	1.1%	0.0%	0.0%	2009				
2010	3.2%	3.4%	0.2%	0.0%	2010					2010				
2011	16.4%	16.3%	0.8%	0.1%	2011	15.3%	15.2%	0.8%	0.1%	2011	7.9%	7.9%	0.4%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-39 Hypothetical "at risk" ex-vesel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 2a ($ Millions), 2003-2011.

2ii (sector allocation 1) Option 2a.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$31.14	$60.75	$1.87	$1.19	2003	$10.83	$21.13	$0.65	$0.41	2003				
2004	$23.89	$46.05	$1.77	$0.52	2004	$17.60	$33.93	$1.30	$0.38	2004	$10.06	$19.39	$0.75	$0.22
2005	$39.48	$78.20	$3.04	$1.78	2005	$36.56	$72.41	$2.81	$1.64	2005	$29.25	$57.93	$2.25	$1.32
2006	$37.10	$66.94	$2.66	$1.54	2006	$29.37	$52.99	$2.10	$1.22	2006	$20.10	$36.26	$1.44	$0.83
2007	$16.44	$33.83	$1.22	$0.95	2007					2007				
2008					2008					2008				
2009	$5.02	$11.25	$0.22	$0.18	2009					2009				
2010					2010					2010				
2011	$32.59	$87.71	$1.67	$0.30	2011	$17.92	$48.24	$0.92	$0.17	2011				
4ii (sector allocation 2) Option 2a.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$31.14	$60.75	$1.87	$1.19	2003	$17.60	$34.34	$1.06	$0.67	2003	$4.06	$7.92	$0.24	$0.15
2004	$23.89	$46.05	$1.77	$0.52	2004	$17.60	$33.93	$1.30	$0.38	2004	$11.32	$21.81	$0.84	$0.25
2005	$40.95	$81.10	$3.15	$1.84	2005	$36.56	$72.41	$2.81	$1.64	2005	$32.17	$63.72	$2.48	$1.45
2006	$37.10	$66.94	$2.66	$1.54	2006	$30.92	$55.78	$2.21	$1.28	2006	$24.74	$44.63	$1.77	$1.02
2007	$16.44	$33.83	$1.22	$0.95	2007	$12.33	$25.37	$0.92	$0.71	2007				
2008					2008					2008				
2009	$5.02	$11.25	$0.22	$0.18	2009					2009				
2010					2010					2010				
2011	$32.59	$87.71	$1.67	$0.30	2011	$24.44	$65.78	$1.25	$0.23	2011				
6 (sector allocation 3) Option 2a.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$32.49	$63.40	$1.95	$1.24	2003	$25.72	$50.19	$1.55	$0.98	2003	$8.12	$15.85	$0.49	$0.31
2004	$23.89	$46.05	$1.77	$0.52	2004	$21.38	$41.20	$1.58	$0.47	2004	$15.09	$29.09	$1.12	$0.33
2005	$43.87	$86.89	$3.38	$1.97	2005	$36.56	$72.41	$2.81	$1.64	2005	$36.56	$72.41	$2.81	$1.64
2006	$37.10	$66.94	$2.66	$1.54	2006	$34.01	$61.36	$2.43	$1.41	2006	$29.37	$52.99	$2.10	$1.22
2007	$16.44	$33.83	$1.22	$0.95	2007	$15.07	$31.01	$1.12	$0.87	2007				
2008	$3.34	$5.93	$0.19	$0.07	2008					2008				
2009	$5.02	$11.25	$0.22	$0.18	2009	$1.26	$2.81	$0.05	$0.04	2009				
2010					2010					2010				
2011	$35.85	$96.48	$1.84	$0.33	2011	$27.70	$74.55	$1.42	$0.26	2011	$13.04	$35.08	$0.67	$0.12

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-40 Hypothetical "at risk" ex-vesssel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 2a, in percent of B season sector revenue, 2003-2011.

2ii (sector allocation 1) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	35.9%	37.4%	2.2%	0.7%	2003	12.5%	13.0%	0.8%	0.3%	2003				
2004	29.8%	31.7%	2.2%	0.4%	2004	22.0%	23.4%	1.6%	0.3%	2004	12.6%	13.3%	0.9%	0.2%
2005	41.6%	43.8%	3.2%	1.0%	2005	38.5%	40.5%	3.0%	0.9%	2005	30.8%	32.4%	2.4%	0.7%
2006	37.7%	39.5%	2.7%	0.9%	2006	29.9%	31.3%	2.1%	0.7%	2006	20.4%	21.4%	1.5%	0.5%
2007	19.6%	20.4%	1.5%	0.6%	2007					2007				
2008					2008					2008				
2009	6.4%	6.6%	0.3%	0.1%	2009					2009				
2010					2010					2010				
2011	33.0%	34.6%	1.7%	0.1%	2011	18.1%	19.0%	0.9%	0.1%	2011				

4ii (sector allocation 2) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	35.9%	37.4%	2.2%	0.7%	2003	20.3%	21.1%	1.2%	0.4%	2003	4.7%	4.9%	0.3%	0.1%
2004	29.8%	31.7%	2.2%	0.4%	2004	22.0%	23.4%	1.6%	0.3%	2004	14.1%	15.0%	1.0%	0.2%
2005	43.1%	45.4%	3.3%	1.0%	2005	38.5%	40.5%	3.0%	0.9%	2005	33.9%	35.7%	2.6%	0.8%
2006	37.7%	39.5%	2.7%	0.9%	2006	31.4%	32.9%	2.2%	0.8%	2006	25.1%	26.3%	1.8%	0.6%
2007	19.6%	20.4%	1.5%	0.6%	2007	14.7%	15.3%	1.1%	0.4%	2007				
2008					2008					2008				
2009	6.4%	6.6%	0.3%	0.1%	2009					2009				
2010					2010					2010				
2011	33.0%	34.6%	1.7%	0.1%	2011	24.7%	25.9%	1.3%	0.1%	2011				

6 (sector allocation 3) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	37.5%	39.0%	2.3%	0.8%	2003	29.7%	30.9%	1.8%	0.6%	2003	9.4%	9.7%	0.6%	0.2%
2004	29.8%	31.7%	2.2%	0.4%	2004	26.7%	28.4%	2.0%	0.3%	2004	18.8%	20.0%	1.4%	0.2%
2005	46.2%	48.7%	3.6%	1.1%	2005	38.5%	40.5%	3.0%	0.9%	2005	38.5%	40.5%	3.0%	0.9%
2006	37.7%	39.5%	2.7%	0.9%	2006	34.6%	36.2%	2.5%	0.8%	2006	29.9%	31.3%	2.1%	0.7%
2007	19.6%	20.4%	1.5%	0.6%	2007	17.9%	18.7%	1.3%	0.5%	2007				
2008	3.2%	3.3%	0.2%	0.0%	2008					2008				
2009	6.4%	6.6%	0.3%	0.1%	2009	1.6%	1.6%	0.1%	0.0%	2009				
2010					2010					2010				
2011	36.3%	38.0%	1.9%	0.1%	2011	28.0%	29.4%	1.4%	0.1%	2011	13.2%	13.8%	0.7%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-41 Hypothetical "at risk" nominal revenue at risk and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 2a in percent of total annual sector revenue, 2003-2011.

2ii (sector allocation 1) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	19.7%	20.4%	0.6%	0.4%	2003	6.8%	7.1%	0.4%	0.1%	2003				
2004	15.1%	16.0%	0.6%	0.2%	2003	11.1%	11.8%	0.8%	0.1%	2004	6.3%	6.7%	0.5%	0.1%
2005	21.2%	22.4%	0.9%	0.5%	2003	19.7%	20.7%	1.5%	0.5%	2005	15.7%	16.6%	1.2%	0.4%
2006	19.6%	20.5%	0.8%	0.5%	2003	15.5%	16.2%	1.1%	0.4%	2006	10.6%	11.1%	0.8%	0.3%
2007	9.8%	10.2%	0.4%	0.3%	2003					2007				
2008					2003					2008				
2009	3.6%	3.7%	0.1%	0.1%	2003					2009				
2010					2003					2010				
2011	19.8%	19.6%	0.4%	0.1%	2003	10.9%	10.8%	0.6%	0.0%	2011				

4ii (sector allocation 2) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	19.7%	20.4%	1.2%	0.4%	2003	11.1%	11.6%	0.7%	0.2%	2003	2.6%	2.7%	0.2%	0.1%
2004	15.1%	16.0%	1.1%	0.2%	2004	11.1%	11.8%	0.8%	0.1%	2004	7.1%	7.6%	0.5%	0.1%
2005	22.0%	23.2%	1.7%	0.5%	2005	19.7%	20.7%	1.5%	0.5%	2005	17.3%	18.2%	1.3%	0.4%
2006	19.6%	20.5%	1.4%	0.5%	2006	16.3%	17.1%	1.2%	0.4%	2006	13.0%	13.7%	0.9%	0.3%
2007	9.8%	10.2%	0.7%	0.3%	2007	7.3%	7.7%	0.5%	0.2%	2007				
2008					2008					2008				
2009	3.6%	3.7%	0.2%	0.1%	2009					2009				
2010					2010					2010				
2011	19.8%	19.6%	1.0%	0.1%	2011	14.8%	14.7%	0.8%	0.1%	2011				

6 (sector allocation 3) Option 2a.

Cap:	25,000				Cap:	75,000				Cap:	200,000			
	AKU/DUT		All Others			AKU/DUT		All Others			AKU/DUT		All Others	
Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA	Year	CV-ExV	SVA	CV-ExV	SVA
2003	20.5%	21.3%	1.2%	0.4%	2003	16.2%	16.9%	1.0%	0.3%	2003	5.1%	5.3%	0.3%	0.1%
2004	15.1%	16.0%	1.1%	0.2%	2004	13.5%	14.3%	1.0%	0.2%	2004	9.5%	10.1%	0.7%	0.1%
2005	23.6%	24.8%	1.8%	0.6%	2005	19.7%	20.7%	1.5%	0.5%	2005	19.7%	20.7%	1.5%	0.5%
2006	19.6%	20.5%	1.4%	0.5%	2006	17.9%	18.8%	1.3%	0.4%	2006	15.5%	16.2%	1.1%	0.4%
2007	9.8%	10.2%	0.7%	0.3%	2007	9.0%	9.4%	0.7%	0.3%	2007				
2008	1.7%	1.7%	0.1%	0.0%	2008					2008				
2009	3.6%	3.7%	0.2%	0.1%	2009	0.9%	0.9%	0.0%	0.0%	2009				
2010					2010					2010				
2011	21.7%	21.6%	1.1%	0.1%	2011	16.8%	16.7%	0.9%	0.1%	2011	7.9%	7.9%	0.4%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.
All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-42 Hypothetical "at risk" ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3, Option 2b ($ Millions), 2003-2011.

2ii (sector allocation 1) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$5.06	$9.87	$0.30	$0.19	2003					2003				
2004	$2.31	$4.45	$0.17	$0.05	2004					2004				
2005	$20.46	$40.51	$1.57	$0.92	2005	$14.25	$28.23	$1.10	$0.64	2005	$10.47	$20.73	$0.81	$0.47
2006	$15.97	$28.81	$1.14	$0.66	2006	$15.97	$28.81	$1.14	$0.66	2006	$9.23	$16.65	$0.66	$0.38
2007	$0.91	$1.87	$0.07	$0.05	2007					2007				
2008					2008					2008				
2009	$3.22	$7.20	$0.14	$0.11	2009	$0.48	$1.07	$0.02	$0.02	2009				
2010					2010					2010				
2011	$14.40	$38.74	$0.74	$0.13	2011	$9.10	$24.48	$0.47	$0.08	2011	$2.48	$6.68	$0.13	$0.02
4ii (sector allocation 2) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$7.07	$13.80	$0.43	$0.27	2003					2003				
2004	$6.34	$12.21	$0.47	$0.14	2004					2004				
2005	$20.46	$40.51	$1.57	$0.92	2005	$14.82	$29.36	$1.14	$0.67	2005	$10.70	$21.18	$0.82	$0.48
2006	$17.31	$31.22	$1.24	$0.72	2006	$15.97	$28.81	$1.14	$0.66	2006	$12.72	$22.95	$0.91	$0.53
2007	$1.57	$3.23	$0.12	$0.09	2007					2007				
2008	$0.37	$0.65	$0.02	$0.01	2008					2008				
2009	$3.25	$7.28	$0.14	$0.12	2009	$0.48	$1.07	$0.02	$0.02	2009				
2010	$1.27	$3.63	$0.07	$0.01	2010					2010				
2011	$14.40	$38.74	$0.74	$0.13	2011	$10.17	$27.38	$0.52	$0.09	2011	$2.75	$7.41	$0.14	$0.03
6 (sector allocation 3) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	$9.66	$18.85	$0.58	$0.37	2003	$2.86	$5.57	$0.17	$0.11	2003				
2004	$8.81	$16.98	$0.65	$0.19	2004	$0.95	$1.83	$0.07	$0.02	2004				
2005	$23.11	$45.77	$1.78	$1.04	2005	$18.20	$36.05	$1.40	$0.82	2005	$11.05	$21.88	$0.85	$0.50
2006	$17.31	$31.22	$1.24	$0.72	2006	$15.97	$28.81	$1.14	$0.66	2006	$15.97	$28.81	$1.14	$0.66
2007	$2.46	$5.06	$0.18	$0.14	2007	$0.40	$0.83	$0.03	$0.02	2007				
2008	$2.32	$4.11	$0.13	$0.05	2008					2008				
2009	$6.27	$14.04	$0.27	$0.22	2009	$0.79	$1.76	$0.03	$0.03	2009				
2010	$2.59	$7.38	$0.14	$0.03	2010					2010				
2011	$14.40	$38.74	$0.74	$0.13	2011	$14.40	$38.74	$0.74	$0.13	2011	$5.92	$15.93	$0.30	$0.06

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-43 Hypothetical "at risk"ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 2b, in percent of B season sector revenue, 2003-2011.

2ii (sector allocation 1) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	5.8%	6.1%	0.4%	0.1%	2003					2003				
2004	2.9%	3.1%	0.2%	0.0%	2004					2004				
2005	21.5%	22.7%	1.7%	0.5%	2005	15.0%	15.8%	1.2%	0.4%	2005	11.0%	11.6%	0.8%	0.3%
2006	16.2%	17.0%	1.2%	0.4%	2006	16.2%	17.0%	1.2%	0.4%	2006	9.4%	9.8%	0.7%	0.2%
2007	1.1%	1.1%	0.1%	0.0%	2007					2007				
2008					2008					2008				
2009	4.1%	4.2%	0.2%	0.1%	2009	0.6%	0.6%	0.0%	0.0%	2009				
2010					2010					2010				
2011	14.6%	15.3%	0.7%	0.1%	2011	9.2%	9.6%	0.5%	0.0%	2011	2.5%	2.6%	0.1%	0.0%
4ii (sector allocation 2) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	8.2%	8.5%	0.5%	0.2%	2003					2003				
2004	7.9%	8.4%	0.6%	0.1%	2004					2004				
2005	21.5%	22.7%	1.7%	0.5%	2005	15.6%	16.4%	1.2%	0.4%	2005	11.3%	11.9%	0.9%	0.3%
2006	17.6%	18.4%	1.3%	0.4%	2006	16.2%	17.0%	1.2%	0.4%	2006	12.9%	13.5%	0.9%	0.3%
2007	1.9%	2.0%	0.1%	0.1%	2007					2007				
2008	0.4%	0.4%	0.0%	0.0%	2008					2008				
2009	4.1%	4.3%	0.2%	0.1%	2009	0.6%	0.6%	0.0%	0.0%	2009				
2010	1.9%	2.0%	0.1%	0.0%	2010					2010				
2011	14.6%	15.3%	0.7%	0.1%	2011	10.3%	10.8%	0.5%	0.0%	2011	2.8%	2.9%	0.1%	0.0%
6 (sector allocation 3) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	11.1%	11.6%	0.7%	0.2%	2003	3.3%	3.4%	0.2%	0.1%	2003				
2004	11.0%	11.7%	0.8%	0.1%	2004	1.2%	1.3%	0.1%	0.0%	2004				
2005	24.3%	25.6%	1.9%	0.6%	2005	19.2%	20.2%	1.5%	0.5%	2005	11.6%	12.3%	0.9%	0.3%
2006	17.6%	18.4%	1.3%	0.4%	2006	16.2%	17.0%	1.2%	0.4%	2006	16.2%	17.0%	1.2%	0.4%
2007	2.9%	3.1%	0.2%	0.1%	2007	0.5%	0.5%	0.0%	0.0%	2007				
2008	2.2%	2.3%	0.1%	0.0%	2008					2008				
2009	8.0%	8.2%	0.3%	0.1%	2009	1.0%	1.0%	0.0%	0.0%	2009				
2010	3.9%	4.1%	0.2%	0.0%	2010					2010				
2011	14.6%	15.3%	0.7%	0.1%	2011	14.6%	15.3%	0.7%	0.1%	2011	6.0%	6.3%	0.3%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.

Table 6-44 Hypothetical "at risk" ex-vessel nominal revenue and shoreside nominal value added pollock first wholesale processing revenue by year, season, and aggregated port group under Alternative 3 Option 2b, in percent of total annual sector revenue, 2003-2011.

2ii (sector allocation 1) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	3.2%	3.3%	0.1%	0.1%	2003					2003				
2004	1.5%	1.5%	0.1%	0.0%	2003					2004				
2005	11.0%	11.6%	0.5%	0.3%	2003	7.7%	8.1%	0.6%	0.2%	2005	5.6%	5.9%	0.4%	0.1%
2006	8.4%	8.8%	0.4%	0.2%	2003	8.4%	8.8%	0.6%	0.2%	2006	4.9%	5.1%	0.3%	0.1%
2007	0.5%	0.6%	0.0%	0.0%	2003					2007				
2008					2003					2008				
2009	2.3%	2.4%	0.0%	0.0%	2003	0.3%	0.4%	0.0%	0.0%	2009				
2010					2003					2010				
2011	8.7%	8.7%	0.2%	0.0%	2003	5.5%	5.5%	0.3%	0.0%	2011	1.5%	1.5%	0.1%	0.0%
4ii (sector allocation 2) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	4.5%	4.6%	0.3%	0.1%	2003					2003				
2004	4.0%	4.2%	0.3%	0.0%	2004					2004				
2005	11.0%	11.6%	0.8%	0.3%	2005	8.0%	8.4%	0.6%	0.2%	2005	5.7%	6.1%	0.4%	0.1%
2006	9.1%	9.6%	0.7%	0.2%	2006	8.4%	8.8%	0.6%	0.2%	2006	6.7%	7.0%	0.5%	0.2%
2007	0.9%	1.0%	0.1%	0.0%	2007					2007				
2008	0.2%	0.2%	0.0%	0.0%	2008					2008				
2009	2.3%	2.4%	0.1%	0.0%	2009	0.3%	0.4%	0.0%	0.0%	2009				
2010	1.1%	1.1%	0.1%	0.0%	2010					2010				
2011	8.7%	8.7%	0.4%	0.0%	2011	6.2%	6.1%	0.3%	0.0%	2011	1.7%	1.7%	0.1%	0.0%
6 (sector allocation 3) Option 2b.														
Cap:	**25,000**				**Cap:**	**75,000**				**Cap:**	**200,000**			
	AKU/DUT		**All Others**			**AKU/DUT**		**All Others**			**AKU/DUT**		**All Others**	
Year	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**	**Year**	**CV-ExV**	**SVA**	**CV-ExV**	**SVA**
2003	6.1%	6.3%	0.4%	0.1%	2003	1.8%	1.9%	0.1%	0.0%	2003				
2004	5.6%	5.9%	0.4%	0.1%	2004	0.6%	0.6%	0.0%	0.0%	2004				
2005	12.4%	13.1%	1.0%	0.3%	2005	9.8%	10.3%	0.8%	0.2%	2005	5.9%	6.3%	0.5%	0.1%
2006	9.1%	9.6%	0.7%	0.2%	2006	8.4%	8.8%	0.6%	0.2%	2006	8.4%	8.8%	0.6%	0.2%
2007	1.5%	1.5%	0.1%	0.0%	2007	0.2%	0.3%	0.0%	0.0%	2007				
2008	1.2%	1.2%	0.1%	0.0%	2008					2008				
2009	4.5%	4.6%	0.2%	0.1%	2009	0.6%	0.6%	0.0%	0.0%	2009				
2010	2.2%	2.3%	0.1%	0.0%	2010					2010				
2011	8.7%	8.7%	0.4%	0.0%	2011	8.7%	8.7%	0.4%	0.0%	2011	3.6%	3.6%	0.2%	0.0%

Notes: AKU/DUT: Denotes the aggregate of all processing facilities in the Akutan and Dutch Harbor areas, including some floating processors.

All Others: May include King Cove, Kodiak, Sand Point, and several floating processors.