ESTIMATED TIME

4 HOURS

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver

Executive Director

DATE: February 1, 2005

SUBJECT: Gulf of Alaska Groundfish Rationalization

ACTION REQUIRED

(a) Receive report from Gulf Rationalization Community Committee and action as necessary.

(b) Review crab/salmon bycatch data and refine alternatives.

BACKGROUND

Committee Report

The Gulf Rationalization Community Committee met January 28 in Anchorage to further refine several of the design and implementation issues related to the Community Fisheries Quota (CFQ) Program and Community Purchase Program, which are components of a proposed rationalization program for Gulf of Alaska groundfish (Item C-2(a)). The committee report will be provided at this meeting.

Crab/Salmon Bycatch Discussion Paper

At the Council's request, a preliminary analysis of salmon and crab bycatch data and options for salmon and crab bycatch reduction measures in the GOA groundfish fisheries has been updated and expanded. The discussion paper is attached at Item C-2(b). This analysis has been updated to include bycatch data as available through 2004, and expanded to include specific items as requested at the December 2004 Council meeting. The salmon and crab bycatch management alternatives are currently included in the proposed rationalization program for Gulf of Alaska groundfish. The Council may wish to refine the draft bycatch management alternatives based on this update.

Council Motion on Gulf of Alaska (GOA) Groundfish Rationalization Community Provisions

Updated as of December 11, 2004

It is the Council's intent that the Community Fisheries Quota (CFQ) Program and the Community Purchase Program (CPP) be the subject of standalone staff analysis for future inclusion in GOA groundfish rationalization alternatives as appropriate. The intent is not to create these programs as a trailing amendment, but to implement them at the same time GOA rationalization goes into effect.

Bering Sea/Aleutian Islands communities (CDQ or otherwise) and communities adjacent to the Eastern GOA regulatory area Southeast Outside District (except Yakutat) will not be included in any Gulf rationalization community provision programs.

PURPOSE: The Council recognizes the importance of providing economic stability for communities historically dependent upon GOA groundfish fisheries. Consistent with the guidance provided by the Consolidated Appropriations Act of 2001, National Standard 8, and the National Research Council Report, the Council acknowledges that rationalization programs can have significant impacts on fishing-dependent communities. Community provisions are intended to address community impacts resulting from rationalization and seek to provide economic stability or create economic opportunity in fishing-dependent communities, and provide for the sustained participation of such communities.

C 1. Community Fisheries Quota (CFQ) Program

The CFQ program would allocate a percentage of the annual Federal TAC to an administrative entity that would subsequently determine how to use the annual harvest privileges according to criteria established in Federal regulation. Depending upon the structure and restrictions established, the non-profit entity would use the shares to enable eligible communities to fish the shares. CFQ will be fished only by eligible community residents and will not be leased outside of the community to be used for other economic development.

The intent of the CFQ program is to mitigate the economic impacts of Gulf groundfish rationalization on small (less than 1500), isolated GOA communities with a historical dependence on groundfish. Further, it is the intent of the program to sustain current participation and access to the fisheries by those communities.

C 1.1 Administrative Entity

The administrative entity representing one or more eligible communities must be a non-profit entity qualified by NMFS. The administrative entity shall be:

- Option 1. A single Gulf-wide administrative entity
- Option 2. An administrative entity for each GOA groundfish management area
- Option 3. An administrative entity representing a group of communities with common culture and history

C 1.2 Eligible Communities

- Option 1. Population (based on 2000 U.S. Census) of less than 1,500 but not less than 25
- Option 2. Geography
 - a. Coastal Communities without road connections to larger community highway network

- b. Communities on the south side of the Alaska Peninsula that are adjacent to Central and Western GOA management areas (including Yakutat) within 5 nautical miles from the water, but not to include Bering Sea communities included under the Western Alaska CDQ program.
- Option 3. Historic Participation in Groundfish Fisheries
 - a. Communities with residents having any commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)
 - b. Communities with residents having any groundfish commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)
- Option 4. GOA (WG, CG, WY) communities eligible under GOA Am. 66 are eligible.

C 1.3 Species

- Option 1. All rationalized groundfish species including PSC
- Option 2. Pollock and Pacific cod and associated species necessary to prosecute the allocation of pollock and Pacific cod

C 1.4 Allocation

- Option 1. 5% of annual TAC
- Option 2. 10% of annual TAC
- Option 3. 15% of annual TAC

CFO awarded to a gulf-wide administrative entity cannot be permanently transferred.

C 1.5 Harvesting of Shares

Option 1. Limited to residents of any eligible community

C 1.6 Allocation Basis

The initial allocation (harvest shares) of CFQ would be made to the administrative entity representing eligible communities.

- Option 1. 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity would be distributed amongst qualified communities on an equal basis.
- Option 2. 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity would be distributed amongst qualified communities on a pro rata basis based on population.
- Option 3. 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity from each GOA groundfish management area, by species, would be distributed amongst qualified communities located in the management area on an equal basis.

C 1.7 Qualification of Administrative Entity

The administrative entity must submit a detailed statement of eligibility to NMFS and the State prior to being qualified. The State may comment on the statement of eligibility but does not have a formal role. The required elements of the eligibility statement will be in regulation.

C 1.8 Administrative Oversight

A report submitted to NMFS detailing the use of QS by the administrative entity. The required elements and timing of the report will be outlined in regulation.

C 2. Community Purchase Program

The CPP would allow a defined set of eligible communities to organize an administrative entity to purchase, hold, and use Gulf groundfish quota share within the rationalization program. In contrast to receiving an initial allocation, this provision would designate an administrative entity representing eligible communities as an eligible quota shareholder under the rationalization program, and that entity would be allowed to purchase GOA groundfish shares on the open market.

The intent of the CPP under GOA groundfish rationalization is parallel to Amendment 66 of the halibut/sablefish IFQ program: to mitigate the economic impacts of GOA groundfish rationalization on small (less than 1500), isolated GOA communities with a historical dependence on groundfish. Further, it is the intent of the program to maintain and enhance current participation and access to Gulf groundfish fisheries by those communities. It is the intent of the Council that staff will adjust the options and elements below to align them consistent with Amendment 66.

The purpose of the CPP is to provide the eligible communities with the opportunity to sustain their participation in the rationalized fisheries through the acquisition of Gulf groundfish fishing privileges.

C 2.1 Administrative Entity

The administrative entity representing a community or communities must be a non-profit entity qualified by NMFS, and may include an administrative entity established to manage Community Fisheries Quota.

C 2.2 Eligible communities

- Option 1. Population (based on 2000 U.S. Census):
 - a. Less than 1,500, but not less than 25
 - b. Less than 7,500, but not less than 25

Option 2. Geography

- a. Coastal Communities without road connections to larger community highway network
- b. Communities on the south side of the Alaska Peninsula that are adjacent to Central and Western GOA management areas (including Yakutat) within 5 nautical miles from the water, but not to include Bering Sea communities included under the Western Alaska CDQ program.

Option 3. Historic Participation in Fisheries

- a. Communities with residents having any commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)
- b. Communities with residents having any groundfish commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)

Option 4. GOA (WG, CG, WY) communities eligible under GOA Am. 66 are eligible.

C 2.3 Qualification of Administrative Entity

The administrative entity must submit a detailed statement of eligibility to NMFS and the State prior to being qualified. The State may comment on the statement of eligibility but does not have a formal role. The required elements of the eligibility statement will be in regulation.

C 2.4 Administrative Oversight

A report submitted to NMFS detailing the use of QS by the administrative entity. The required elements and timing of the report will be outlined in regulation.

C 2.5 Ownership/Use Caps

Option 1. Individual community Gulf groundfish QS/GH cap of:

a. 1%

b. 2%

c. 3%

Option 2. Aggregate community Gulf groundfish QS/GH cap of:

a. 10%

b. 15%

c. 20%

Salmon and Crab Bycatch Measures for GOA Groundfish Fisheries

February 2005 Staff Discussion paper

INTRODUCTION

The North Pacific Fishery Management Council (Council) has adopted measures over the years to control the bycatch of some species taken incidentally in groundfish fisheries (Witherell and Pautzke, 1997). Bycatch control measures have been established in the Bering Sea and Aleutian Islands trawl fisheries for Chinook salmon (Oncorhynchus tshawytscha), 'other salmon' (consisting primarily of chum salmon, O. keta), Pacific herring (Clupea pallasi), Pacific halibut (Hippoglosses stenolepis), red king crab (Paralithodes camtschaticus), Tanner crab (Chionoecetes bairdi), and snow crab (C. opilio). Halibut bycatch limits and bottom trawl closure areas to protect red king crab have also been established for Gulf of Alaska (GOA) groundfish trawl fisheries (NMFS 2003). To date, no bycatch control measures have been implemented for salmon or crab species taken incidentally in GOA groundfish fisheries.

In December 2004, the Council tasked staff to update and expand upon a preliminary analysis on options for salmon and crab bycatch reduction measures in the GOA. The Council further requested that the updated analysis include a discussion of crab abundance, bycatch and existing closure areas as outlined by the Council (see attached 12/04 Council motion). In this paper, we provide a general overview of the available information on salmon and crab bycatch, with specific emphasis on those details (where information was available) requested by the Council in December.

METHODS

Catch and bycatch data were provided by the NMFS regional office and the North Pacific groundfish fishery observer program, and examined to gain insight into the amount, species composition, timing, and location of salmon and crab caught incidentally in GOA groundfish fisheries. NMFS catch statistics for years 1990-2004 for salmon and crab bycatch were summarized annually by each groundfish trawl fishery. Additionally, the amount of bycatch was reported by both a weekly and quarterly period to determine any temporal aspect to the bycatch rates for the fisheries with the highest bycatch. Average amounts of bycatch for multiple years and for percent contribution by individual fisheries were calculated with equal weighting given to each year utilized. No attempt was made to weight individual years higher than others. The observer data represented all trawl catch for a given year, and was queried to produce bycatch of observed hauls by target fishery. Specific locations of salmon and crab bycatch were input into a GIS to produce charts of catch locations. Information on crab survey abundance estimates were obtained by published ADF&G reports as well as data provided by the ADF&G staff.

The North Pacific Groundfish Observer Program collects catch and bycatch data used for management and inseason monitoring of groundfish fisheries. Since 1990, all vessels larger than 60 ft (length overall) participating in the groundfish fisheries have been required to have observers onboard at least part of the time. The amount of observer coverage is based on vessel length, with 30% coverage required on vessels 60 ft to 125 ft, 100% coverage on vessels larger than 125 ft, and 100% coverage at shore-based processing facilities. There are no observer coverage requirements for vessels less than 60 ft. Since January 2003, observer requirements for pot vessels > 60 feet have been modified such that these vessels are only required to have coverage on 30% of their pots pulled for that calender year as opposed to the 100% of the fishing days coverage required on other vessels > 125 feet. Observer data provide for accurate and relatively precise estimation of groundfish catch, particularly on fleets with high levels of observer coverage, such as the Bering Sea walleye pollock fishery (Volstad et al. 1997). However, the precision of salmon bycatch estimates depends upon the number of vessels observed and the fraction of hauls sampled within vessels (Karp and

McElderry 1999). In the Bering Sea, fisheries such as walleye pollock have a high percentage hauls that are sampled so fleet wide estimates of salmon bycatch are considered to be reasonably accurate for management purposes (NPFMC 1995a, 1995b, 1999).

For Gulf of Alaska fisheries, observer coverage is lower in some target fisheries due to the prevalence of smaller vessels in the GOA fishing fleet than in the Bering Sea fleet. Only 53% of bottom trawl vessels in the GOA had observed coverage between 1990-2000 (Coon and Heifetz, in press). Table 1 shows the average number (2000-2002) of vessels participating in the GOA groundfish fishery (NPFMC 2004a). Vessels are listed by sector, permit type and vessel class. Table 2 shows the estimated percentage of the total catch that was observed by gear type and fishery in 1997, 2000 and 2001. Over the past ten years, there has generally been an increasing level of participation by smaller vessels in the GOA groundfish fisheries, particularly trawl and fixed gear catcher vessels less than 60 ft (NPFMC 2003). Therefore, it should be noted that estimates of salmon and crab bycatch in GOA fisheries may be less precise than estimates of bycatch in Bering Sea fisheries.

Catch Accounting

Data from observed vessels is utilized to determine prohibited species catch (PSC) rates when sufficient data are available. The PSC rate is the weight or number of animals per metric tons of groundfish; salmon are calculated by number. All shoreside processing with the same gear, target, and area use an average PSC rate for all observed catcher vessels with the same gear, target, and area. An observed catcher/processor uses the rates from the observer on the vessel. An unobserved catcher/processor uses a PSC rate from observed vessels in the same area and target fishery using the same gear type. The smaller vessels (under 60 ft) with no observers, and those that only require 30% observer coverage utilize rates calculated based on the best data available. The first choice is to use one of four different types of "three week average rates" for the same week, reporting area, gear and target. Three of the four types are sector rates that use either observer data from catcher vessels delivering to shoreplants, catcher vessels delivering to motherships or data from catcher processor observers. The sector rates are used and applied to unobserved catch from the corresponding sector if a sufficient number of observer reports are available. The fourth rate combines data from all catcher vessels and catcher processor observers. The combined rate is used only if an insufficient amount of observer data exists to be able to use one of the three sector rates. If one of the four different types of "three week average" sector rates do not have sufficient observations, a substitute rate based on data from prior years, in the same reporting area, gear and target may be used as the second choice. If that is not available, the third choice is for GOA and BSAI annual average year rates using the same gear and target.

Once the PSC rate has been determined, the PSC estimates are computed by multiplying the rate for each prohibited species times the total groundfish weight for the processor from the groundfish catch accounting system. Key information including week, reporting area, gear and target are used to match PSC rates with the groundfish catch.

Several improvements were made to the catch accounting system in 2003 which include computing PSC rates daily instead of weekly. Observed catcher vessels also now use the rates from the observer on the vessel rather than an average PSC rate for all observed catcher vessels applied to the shoreside processor data with the same gear, target, and area. Although this data methodology is not as accurate as having an observer onboard 100% of the hauls on all vessel sizes, it is repeatable and uses the best known information (NMFS, AKR, Mary Furuness personal communication).

Mortality Rates

Gear specific mortality rates for crab species have been calculated as 8% for pot gear, 80% for trawl gear, 37% for longline gear, and 40% for scallop dredge gear (NPFMC 1995). NRC (1990) estimates for trawl

caught king crab range from 2-81%, while Tanner crab mortality estimates from trawl gear range similarly from 12-82%. Mortality studies for crab which did not distinguish between species estimate trawl mortality rates of 50-100%. Longline mortality rates for crab (no species distinguished) in the GOA range from 0-50% (FAO 1990).

Bycatch mortality rates in the directed snow crab fishery (pot rates) were estimated for discarded snow crabs during the 1998 fishery (Warrenchuck and Shirley 2002). An estimate of 22.2% mortality which included the estimated effects of wind and cold exposure as well as handling injuries was considered to be a conservative estimate because these factors were considered separately and not synergistically (Warrenchuck and Shirley 2002). These results were in agreement with NPFMC estimates for bycatch mortality in the directed crab pot fishery of 25% (NPFMC 1999). Available studies on Tanner crab mortality in the GOA were all laboratory studies of natural mortality in crabs and focused upon snow crab not C. bairdi Tanners (e.g. Shirley 2004). No additional studies on trawl or pot caught mortality rates for C. bairdi (or any other) crabs in the GOA were available at this time (T. Shirley, personal communication). A summary of mortality rate studies, information and estimated mortality rates is provided in the Stock Assessment and Fishery Evaluation (SAFE) report for the BSAI king and Tanner crabs (NPFMC 2004b). Discard mortality rates for red king crab have been estimated at 37% for longline fisheries and 37% for pot fisheries (NPFMC 1999). Estimated bycatch mortality rates for Tanner crab were 45% in longline fisheries and 30% in pot fisheries. In the analysis for Amendment 37, a 37% mortality rate was assumed for red king crab taken in longline fisheries and an 8% rate for pot fisheries. Observer data on conditions factors collected for crab during the 1991 domestic fisheries suggested lower mortality of red king crab taken in groundfish pot fisheries (NPFMC 1996).

Salmon mortality rates are also highly variable both by gear type and for different size salmon. Legal-size chinook salmon caught in troll gear have an estimated mortality rate as low as 8%, while longline gear mortality rates have been estimated to be as high as 100% (FAO 1990). For the purpose of this discussion it is assumed that the full bycatch of salmon has a 100% mortality rate within the longline and trawl fisheries.

RESULTS

Salmon Bycatch

The following section provides updated bycatch information for salmon in the GOA. A more detailed report on salmon bycatch in Alaska groundfish fisheries is provided by Witherell et. al (2002).

Amount of Bycatch

Pacific salmon, including Chinook, chum, coho (O. kisutch), sockeye (O. nerka), and pink (O. gorbuscha) are taken incidentally in the groundfish fisheries within the Gulf of Alaska. Salmon are not generally caught in longline and pot gear (Berger 2003). However, salmon are taken incidentally in most GOA trawl fisheries, thus this discussion focuses upon bycatch in the trawl sector. Salmon bycatch is currently grouped as Chinook salmon or 'other' salmon, which consists of the other 4 species combined. Over 95% of the 'other salmon' bycatch consists of chum salmon (Table 3). Bycatch of Chinook salmon in the last 5 years (average of 17,643 salmon, 2000-2004) is slightly lower than the time series average (average of 19,733 salmon, 1990-2004). The bycatch of 'other' salmon in the last 5 years (average of 7,252 salmon, 1990-2004) is much lower than the time series average (average of 17,572 salmon, 1990-2004).

Other salmon bycatch has declined substantially from the 1993-1995 period. Bycatch of 'other' salmon in the GOA groundfish trawl fisheries from 1993-1995 are shown in Table 4. Bycatch was highest in the month of July, hitting a peak in 1993 of 48,518, and again in 1995 of 42,164. This peak in other salmon bycatch

during this period was due to the timing of the pollock trawl fishery. During these years the season opened in July. In 2000, the pollock trawl fishery timing was changed due to changes in regulation for Steller sea lions to the current seasonal openings of January 20, March 10, August 25 and October 1. Since this time the other salmon bycatch has been far less than the peak in 1995. Since 1995, the highest annual amount of other salmon bycatch was 13,539 in 1998, with amounts decreasing to 3,218 in 2002. Other salmon bycatch increased in 2003 to 10,400 but declined again in 2004 to 5,650. The average bycatch of other salmon during 1993-1995 was 52,803 while from 2000-2004 the average bycatch was 7,252.

In the 2000-2004 fisheries, an average of about 10,000 Chinook salmon per year were taken by the walleye pollock fishery, 2,700 chinook salmon in the Pacific cod fishery, 3,800 Chinook salmon in the flatfish fishery (all targets combined), and 900 Chinook salmon in other target fisheries (Table 5). In an average year, the walleye pollock fishery accounted for 58% of the chinook salmon bycatch, with the trawl fisheries targeting Pacific cod taking 16%, and flatfish fisheries taking 21%. About 3,600 'other' salmon were taken in the walleye pollock fishery, on average, during the 2000-2004 fisheries. In 2002 and 2004, bycatch of other salmon in this fishery was drastically reduced to 795 (in 2002) and 606 (in 2004), although the annual bycatch numbers showed an increase to 6,422 in 2003. Nevertheless, in an average year, more of the 'other' salmon bycatch has been taken in the walleye pollock trawl fishery (50%) than other target fisheries, with the flatfish fishery also taking a substantial portion (39%). It is likely that relative amounts of bycatch taken in the walleye pollock fisheries have been lower in recent years due to reduced catch limits for walleye pollock catches.

Location and Timing of Bycatch

The timing of salmon bycatch in GOA fisheries followed a predictable pattern in 2004. Chinook salmon were taken regularly from the start of the trawl fisheries on January 20th through early April, and also in high quantities during September and October in the walleye pollock fishery (Figure 1). Chum salmon were not taken in any great numbers until mid-June, after which they were taken regularly through the end of the season (Figure 2). The timing of salmon bycatch in 2004 appears similar to what occurred in previous years. However, the 2000 fishery exhibited a different temporal pattern of bycatch, perhaps due to the U.S. District Court order that forced the walleye pollock fleet to fish outside of Steller sea lion critical habitat (Witherell et al. 2002).

Salmon bycatch occurs in the western and central GOA management areas, corresponding to locations of the trawl fisheries. Since 1998, the eastern GOA (east of 140°W longitude) has been closed to all trawling, with the implementation of amendment 58 to the GOA groundfish FMP. During the 2000-2002 period, Chinook salmon were taken in relatively higher numbers in some trawl hauls to the east of Kodiak Island (up to 380 salmon per haul), although they can be taken in relatively high numbers per haul in other areas (Figure 3). A closer examination of where Chinook salmon bycatch occurs in the walleye pollock fishery around Kodiak Island is provided in Figure 4. 'Other' salmon bycatch (up to 162 salmon per haul) occurs in the central GOA to the south and east of Kodiak Island, as well as in the western GOA south of the Alaska Peninsula (Figure 5). In the pollock fishery, the bycatch occurs east of Marmot Island and in the Barnabus Gully (Figure 6).

Comparison of salmon bycatch with regional and foreign run strength and hatchery release

Several countries in addition to the U.S. have hatchery releases of chum and chinook salmon. The North Pacific Anadromous Fish Commission tabulates summaries of these hatchery releases in millions of fish (Table 6). For Chinook salmon, Canada and the United States share the highest amount of hatchery releases, with the U.S. releases predominantly in the Alaska region and the Canadian releases predominantly located in the western and southern coasts of Vancouver Island. For chum salmon a far greater amount of hatchery releases are recorded in Japan than Canada, the United States or Russia. No correlation is available, however, with the bycatch of salmon in the GOA and the release from any of these hatchery sites.

It is difficult to ascertain direct effects of hatchery salmon releases and bycatch of salmon without specific information on those taken salmon. Currently the only information gathered is from Coded Wire Tags. The High Seas Salmon Research Program of the University of Washington routinely tags and monitors Pacific salmon species. The Coded Wire Tag (CWT) information may not accurately represent the true distribution of hatchery caught salmon however as much of the CWT tagging occurs within the British Columbia hatcheries and thus most of the CWT recovered come from those same hatcheries. CWT tagging does occur in some Alaskan hatcheries, specifically in Cook Inlet, Prince William Sound, other Kenai region hatcheries as well as in hatcheries in Southeast Alaska (Johnson, 2004). Some CWT studies have also tagged Washington and Oregon salmon and many of these tagged salmon have been recovered in the GOA (Myers et al. 2004). The 2003 program report for the High Seas Salmon Research Program details additional data on west coast salmon tag recoveries (Myers et al 2004). In 2003, 124 tags were recovered in the eastern Bering Sea and GOA. Of these tags, 103 were recovered in groundfish trawl fisheries while 21 were recovered by U.S. and Japanese research vessels. Overall tagging results in the GOA showed the presence of Columbia River Basin chinook and Oregon Chinook salmon tag recoveries (from 1982-2003). Some CWT recovered by research vessels in this time period also showed the recoveries of coho salmon from the Cook Inlet region and southeast Alaska coho salmon tag recoveries along the southeastern and central GOA. Scientists at the University of Washington are currently studying the stock origins of Chinook salmon incidental catch in the eastern Bering Sea (Myers et al. 2004), however no studies have specifically examined the stock composition of salmon bycatch from GOA trawl fisheries.

Future studies of Chinook salmon bycatch will likely utilize allozyme methodology, because the allozyme baseline is complete enough to discriminate Chinook stocks in Bering Sea stock mixtures (Teel et al. 1999). Allozymes have been successfully applied to Chinook mixtures from confiscated high seas Chinook salmon catches (R. Wilmot, National Marine Fisheries Service, Juneau, personal communication). Attempts are underway to obtain further tissue collections from Russian stocks that would improve the accuracy of allozyme methods for delineating stock origins. However, funds to collect and analyze Chinook samples from trawl bycatch are limited. The allozyme methodology, however, has been applied to chum salmon samples collected by research gillnets in the high seas (Urawa et al. 2000). Results indicate that Alaska stocks were common in the eastern central GOA (15% western Alaska, 25% Alaska Peninsula and Kodiak, 28% Southeast Alaska, 18% from Canada), and Asian chum salmon were predominant in the western GOA (25% Japan, 53% Russia, 13% western Alaska, 10% elsewhere). Chum salmon research in the Bering Sea was also recently completed, which details additional information on the origin of those stocks (Urawa et al. 2004).

Additional research on stock discrimination for Chinook salmon is being conducted using microsatellite DNA, but the microsatellite DNA baseline is not complete enough at present to be used for analysis of Chinook salmon mixtures that potentially include Chinook salmon throughout the Pacific Rim (A. Gharrett, University of Alaska Fairbanks, personal communication). Current research is focusing upon establishing this baseline for future use in this regard (Gharrett et al. 2005). Preliminary results suggest that there are distinguishable characteristics between U.S., Canadian and Russian salmon stocks (Gharrett et al. 2005).

Crab Bycatch

Several species of crabs may be taken incidentally in GOA groundfish fisheries. In the NMFS observer 'Blend' database (utilized through 2002), NMFS categorized the bycatch amounts into 4 groups: red king crab, 'other' king crab, C. bairdi Tanner crab, and 'other' Tanner crabs. The 'other' king crab category may include blue king crab (P. platypus), golden king crab (Lithodes aequispina), and scarlet king crab (L. couesi). Although observer records have not been reviewed to ascertain the relative contribution of these species to the 'other' king crab category, it is likely that the vast majority, if not all, of these crab are golden king crab. Golden king crab are associated with deeper waters than blue king crabs and are found generally in slope areas (NMFS 2003). Thus the likelihood of the "other" king crab bycatch being comprised

predominantly of golden king crab is high. The 'other' Tanner crab category may include two deepwater species: triangle Tanner crab (*C. angulatus*) and grooved Tanner crab (*C. tanneri*). Under the catch accounting system (implemented since 2003), golden king crab and blue king crab are reported individually while 'other' Tanner remains a combined category for reporting purposes.

Amount of Bycatch in Trawl Fisheries

The number of crabs taken as bycatch in GOA groundfish trawl fisheries are shown in Table 7. Bycatch of red king crabs, other king crabs, and other Tanner crabs is relatively low. An average of 98 red king crabs and 622 individuals of other king crab species were taken in 2000-2004 trawl fisheries.

Since 1993, the majority of red king crab have been taken in the combined flatfish fisheries, and in the rockfish trawl fisheries. The highest amounts of red king crab bycatch since 1998 occurred in 2004 fishery with 361 red king crabs caught. Of these 272 were from the rockfish trawl fishery (Table 8). For golden king crab (2003-2004 data), the flatfish and rockfish trawl fisheries account for the majority of crab bycatch (Table 9). Some golden king crab are also taken in the longline sablefish fishery.

The bycatch of *C. bairdi* Tanner crabs in GOA trawl fisheries has fluctuated through the time series, reaching a high of 136,769 crabs in 2003 to a low of 29,947 crabs in 1999. Bycatch of *C. bairdi* Tanner crabs in the last 5 years (93,025 crabs per year average, 2000-2004) is slightly higher than the average for the time series from 1993-2004 (79,238 crabs). Trawl fisheries account for about 65% of the *C. bairdi* Tanner crabs taken as bycatch in GOA groundfish fisheries, with the fisheries using pot gear accounting for about 35% of the *C. bairdi* Tanner crab bycatch, based on the 2000-2004 average (Table 10). Within the trawl fisheries, combined flatfish fisheries make up 81% of the total trawl contribution on average from 2000-2004, or 53% of the total average for those years (Table 10). Pacific cod trawl fisheries make up 14% of the total trawl contribution. Trawl fisheries, particularly the flatfish fisheries experienced a dramatic increase in *C. bairdi* Tanner bycatch in 2003. No data was available for this analysis in order to further examine the location of effort in these fleets over this time period.

Location and Timing of Bycatch in Trawl Fisheries

Bycatch amounts of *C. bairdi* Tanner crab taken in trawl fisheries appear to fluctuate temporally in direct response to groundfish catches, particularly catches of Pacific cod and flatfish, which are managed on a quarterly basis, with the trawl fishery beginning on January 20th each year. The seasons for trawl gear increased to 5 beginning in 2001. Bycatch of Tanner crabs in 2003 (in numbers of crabs)increased dramatically in mid-March due to bycatch in the combined flatfish fishery, and was high from late April through May and once again in mid-October (Figure 8), each time in the flatfish fisheries, notably in the flathead sole fishery (March), Shallow water flatfish (April-May) and Arrowtooth flounder fisheries (October). Bycatch of *C. bairdi* Tanner crabs in 2004 was highest (in numbers of crab) during March and early April (shallow water flatfish), corresponding to seasonal release of the halibut PSC apportionment for use in the flatfish fishery with an additional spike in late July (Arrowtooth flounder) (Figure 8).

The spatial distribution of bycatch was examined for all four crab categories from 2000-2002, including red king crab, other king crab, *C. bairdi* Tanner crab, and other Tanner crab (Figures 9-12). Bycatch of *C. bairdi* Tanner crab was aggregated in the vicinity of Kodiak Island, but some bycatch also occurred south of the Alaska Peninsula (Figure 9). Other species of Tanner crab were taken in low numbers along the slope, and at higher numbers in a few nearshore locations (Figure 10). Only 5 observations were made of red king crab bycatch, including one off Southeast Alaska that was presumably taken by longline gear (Figure 11). Other king crabs were taken along the slope in the central and western GOA, and a few outside of Ugak Bay off Kodiak (Figure 12). As previously stated, given this distribution, the other king crab taken on the slope were probably all golden king crab (from 2003 on golden king crab are reported separately).

Amount of bycatch in longline and pot fisheries

Bycatch of golden king crab, red king crab and *C. bairdi* Tanner crab by gear and fishery for 2000-2004 (2003-2004 for golden king crab) are shown in Tables 8, 9 and 10. Longline gear catches very few crabs of any species.

For red king crab, the average number of crabs taken in all fisheries for 2000-2004 is 132 crabs. Of this, 77% were in the trawl fishery, 8% in the pot fishery and 14% in the longline fishery. For golden king crab, 82% were from the trawl fishery with 18% in the longline fishery.

The average percent contribution by gear type for *C. bairdi* Tanner crab are: 65% for combined trawl fisheries, 35% for pot fisheries and <0.01% for all longline fisheries (Table 10). Bycatch of *C. bairdi* Tanner crabs in the Pacific cod pot fishery was notably higher from 2000-2002 but decreased dramatically in 2003 and 2004. Further examination of the location of the pot cod fishery (and flatfish trawl fishery) would possibly provide an explanation for the relative decrease in crab bycatch in the pot cod fishery and increase in the flatfish fishery. Also, as was noted in the previous discussion, the relative observer coverage in these fleets is limited, particularly in the Pacific cod pot fishery (Table 2).

Contribution to bycatch by the state waters cod fishery

An examination was made of the state waters Pacific cod fishery contribution to the C. bairdi Tanner crab bycatch amounts (Table 11). Preliminary data were obtained by ADF&G for three locations in the Western GOA: Kodiak, South Peninsula and Chignik. Data were available for various years in each location. In the Kodiak region, data were obtained for 1997, 1998, 1999, 2001 and 2004. Of these years, 2001 showed the highest number of Tanner crab, 171 crab. It was noted by ADF&G that this was obtained in only one observed trip. In the S. Peninsula region, the highest number of Tanner crab was obtained in 2001 where 52 crab were caught as compared with 0 to 1 in all other years for which data were obtained for this region (1998-2004). For Chignik, 2003 was the only year for which preliminary data were available. Here 42 crabs were obtained as bycatch. The state waters bycatch numbers for C. bairdi Tanner crab are still low in comparison to total C. bairdi Tanner numbers in the GOA. Currently due to the absence of a full state onboard observer program less than 1% of the state waters fishery is observed. ADF&G staff had noted that due to rising concerns regarding the limited available observed pots increased effort would be made to observe more trips during the 2004 fisheries (Mike Ruccio, personal communication). Unfortunately, the short and intense season in 2004 made it very difficult for ADF&G staff to allocate a dockside sampler for an observer trip thus only one new observer trip was possible last year (Kally Spalinger, personal communication).

King and Tanner crab population estimates

Population estimates for the Kodiak District, S. Peninsula and Chignik king and Tanner crabs were provided by ADF&G based upon annual survey abundance estimates. For red king crabs, the population estimate for the Kodiak District was 713,249 crabs, an increase from the previous survey. A large number of total females were present in the survey abundance data in 2001 (Figure 13). However successive surveys in 2002, 2003 and 2004 indicated that population estimates for females were much lower. The 2004 survey abundance estimates for legal males was the highest for the last 10 years (Figure 13). The Alaska peninsula stocks however are at a historic low with an estimated abundance of 43,509 crabs. These were mostly located in Pavlof Bay. Despite some encouraging results in 2001 and 2002, the population estimates from 2004 survey showed very few recruits or legals males, and female crabs were estimated below 30,000 (Figure 14).

For the Cook Inlet management region, no population abundances are estimated, but the survey is used to provide a relative abundance index (thus no extrapolation is done on survey data for an overall population

abundance estimate). However, based on the abundance index, the red king crab stocks in the Cook Inlet management region are considered to be severely depressed and patchily distributed. It was noted in the assessment that all of the current population of red king crabs in the region are vital to supporting the existing population (Bechtol et al. 2002). In the Southeast management region, pot surveys are used to estimate trends in abundance in northern and southern bays of the region, however a regional estimate of total population is not available. Survey results are utilized to estimate relative abundances, estimated as catch per pot day for each sex and size class of crabs. Survey results indicated greater increases in abundance in the northern regions though both northern and southern regions have abundances comparable to the relatively high abundances seen in the early 1980s (Clark et al. 2003)

For C. bairdi Tanner crab, population estimates for the Kodiak District are at approximately 175.9 million crabs, for S. Peninsula 14.3 million crabs, and Chignik 12.7 million crabs (Worton 2002). For the S. Peninsula this estimate represents an increase from the previous survey. Recent survey results indicate an increase in females from 2000-2002 (Figure 15). Estimates for Chignik show a decline through 2002 in total females but an increase in 2003 (Figure 16). Population estimates for Cook Inlet management region list male C. bairdi Tanner crab abundances in the Southern region as 3.1 million males, however it was noted that the estimate of legal sized males is at a historic low. Female abundance in this region was estimated at 2.1 million crabs in 2001, primarily due to a very high number of estimated juveniles. The southern region has been closed to commercial fishing due to low crab abundances since 1995 (Bechtol et al 2002). The Kamishak and Barren Islands District of the Cook Inlet management region has also been closed to commercial fishing (since 1991) due to concerns of low crab abundance. In these regions the male abundance is estimated at 6.1 million crabs, with a near historic low in mature males, while female abundance is estimated at 5.1 million crabs with a record low percentage of mature females. There is limited data to assess the Outer, Eastern, and Central Districts of the Cook Inlet management region and both regions have been closed to commercial fishing (since 1998 for Central and 1993 for Eastern/Outer). For the Southeast region, a population survey was begun in 1997/1998 to evaluate regional distribution of C. bairdi Tanner crab stocks and the relative abundance estimates. However, at present, no estimates of overall C. bairdi Tanner crab abundance in the region are available.

Comparison of Survey Abundance, Existing Closures and Trawl Fishery Bycatch (through 2002)

At the December 2004 meeting, the Council requested that staff examine the spatial overlay of king and Tanner abundance estimates from recent surveys, location of existing closure areas, and the fishing effort and crab bycatch rates for these areas. ADF&G staff were able to provide survey abundance data for the Kodiak, South Peninsula and Chignik areas for red king crab and *C. bairdi* Tanner crab. While fishing effort and bycatch rate data were not available for all years and fisheries at this time, the following section details the closure areas, crab abundance estimates (including related size classes in the data), fishery bycatch of red king crab and *C. bairdi* Tanner crab from 1993-2002, and where possible the bycatch (and rate) by individual target fishery categories for specific years.

The existing fishery closures in the Gulf of Alaska are shown on figure 17. These closures include Type I and Type II closures for red king crab around Kodiak, Steller sea lion closures (including haulout and rookery no trawl closures, no-transit closures and research closures), scallop dredge closures and the Cook Inlet bottom trawl ban. The locations of the ADF&G king and Tanner crab surveys are shown on figure 18.

Red king crab

Survey abundance estimates for red king crab for 2001 (Figure 19), 2002 (Figure 20) and 2003 (Figure 21) are shown with existing closures and the observed bycatch of red king crabs in all groundfish fisheries from 1993-2002. Red king crab abundance is primarily concentrated nearshore and in bays around Kodiak. Higher estimates in recent years (2002 and 2003) were found in the southern region of the survey near the Trinity

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Islands (Figures 20 and 21). The highest observed bycatch numbers for red king crab are also concentrated in the area near the Trinity Islands and north of Chirikof Island. Because these observations are not limited to the time period following the SSL closures (2000) some of the observed locations which appear to fall within trawl closures may be from years prior to the enactment of the regulations.

The bycatch rate in number of crab per metric ton of groundfish were available for three trawl fisheries, shallow water flatfish (Figure 22), deep water flatfish (Figure 23) and Pacific cod (Figure 24). In the shallow water flatfish trawl fishery, the highest bycatch rate was seen to the north of Chirikof, to the east of the Trinity Islands and inside Marmot Bay (Figure 22). In the deep water flatfish fishery, the highest bycatch rates were observed to the north of Chirikof and to the South west towards the Shumagins (Figure 23). In the cod trawl fishery, bycatch rates were highest near Portlock Bank (Figure 24).

Tanner crab

Survey abundance estimates for *C. bairdi* Tanner crab for 2001 (Figure 25), 2002 (Figure 26) and 2004 (Figure 27) are shown with the existing closures. Abundance estimates in 2001 are highest in Marmot Bay, off Cape Chiniak and to the West of Alitak Bay (Figure 25). In 2002 the population estimates are highest in the region off Cape Chiniak, and were predominantly female (Figure 25). In 2003, estimated abundance was highest in the Albatross Bank region with the highest estimate split between males and females while the surrounding stations had lower overall estimates and were comprised of primarily females (Figure 27).

The bycatch of *C. bairdi* Tanner within the flatfish trawl fisheries in 2002 together with *C. bairdi* Tanner crab abundance for 2002 and existing closures are shown in figure 28. The bycatch is highest in the areas of Marmot Bay, along Albatross Bank, the southern and eastern shore of Kodiak, and northeast of the Trinity Islands.

The bycatch rate in number of crab per metric ton of groundfish were available for three trawl fisheries: shallow water flatfish (Figure 29); deep water flatfish (Figure 30); and Pacific cod (Figure 31). In the shallow water flatfish fishery, the highest rates were on Albatross Bank and southeast of the Trinity Islands. High rates were also observed along the southern and eastern shore of Kodiak, on Portlock Bank and in Shelikof Strait (Figure 29). In the deep water flatfish fishery, high rates were observed along the Alaska Peninsula, throughout Shelikof, near Ugak Bay and along Cape Trinity (Figure 30). In the cod trawl fishery, the highest rates were from Cape Trinity to Cape Chiniak and near Ugak Bay (Figure 31).

Proposed Closure Areas

At their October 2004 meeting, the Council moved to include a discussion of the Alaska Marine Conservation Council (AMCC) Tanner Crab proposed trawl closure areas in the western GOA which were submitted in public testimony. The existing closure areas in the western GOA are shown with the proposed additional closures (Figure 32). These closures are proposed to protect Tanner crab stocks. A close-up view of the southeastern Kodiak proposed closures (in Ugak Bay, Cape Barnabus, Kaiugnak Bay and Alitak and Olga Bays are shown with the survey abundance for 2002 and the observed Tanner crab bycatch in all groundfish fisheries from 1993-2002 (Figure 33). This provides an example of how closure areas may be conceptualized and analyzed for their relevance in conserving crab stocks as well as the related impact upon the fishing fleet. At this point, no additional closure areas have been designated or proposed by the Council.

DISCUSSION

In February 2002, the Council initiated the analysis of alternatives to control salmon bycatch in the GOA groundfish trawl fisheries, and proposed alternatives, which included bycatch limits based on 1990-2001

average bycatch amounts (21,000 chinook salmon and 20,500 'other' salmon). Attainment of these limits by trawl fisheries would result in closure of specified areas for the remainder of the fishing year. The Council further clarified that specified areas would be designated based on analysis of areas that have had historically high bycatch rates. Recent analysis suggests that these bycatch limit amounts may not reflect the current manner in which the groundfish trawl fisheries operate and the reduced bycatch of salmon in more recent years.

Draft alternatives were provided by staff in 2003 for Tanner crab and chinook salmon bycatch reduction measures. Since initiating this analysis, the Council has expanded the alternatives to include red king crab, other king crab and other salmon as species also potentially meriting special consideration for bycatch reduction. The alternatives have been folded into the larger GOA groundfish rationalization EIS package for analysis. The Council tasked staff to provide additional information as possible on population abundance of king and Tanner crab, existing closure areas and proposed trawl closure areas as noted in public testimony in the October 2004 meeting. Providing the additional information as contained in this paper is intended to assist the Council in refining the alternatives and focusing the measures appropriately.

The following are the draft alternatives as modified by the Council in October 2003 and folded into the GOA groundfish rationalization draft motion in October 2004:

Chinook Salmon

- Alternative 1: Status Quo (no bycatch controls).
- Alternative 2: Trigger bycatch limits for salmon. Specific areas with high bycatch (or high bycatch
 - rates) are closed for the remainder of the year if or when a trigger limit is reached
 - by the pollock fishery.
- Alternative 3: Seasonal closure to all trawl fishing in areas with high bycatch or high bycatch
 - rates.
- Alternative 4: Voluntary bycatch coop for hotspot management.

Other Salmon

- Alternative 1: Status Ouo (no bycatch controls).
- Alternative 2: Trigger bycatch limits for other salmon. Specific areas with high bycatch (or high
 - bycatch rates) are closed for the remainder of the year if or when a trigger limit is reached by the pollock trawl fishery (and potentially additional areas for flatfish
 - trawling).
- Alternative 3: Seasonal closure to all trawl fishing in areas with high bycatch or high bycatch
 - rates.
- Alternative 4: Voluntary bycatch coop for hotspot management.

Tanner Crab

Include in staff analysis a discussion of the AMCC Tanner Crab proposed trawl closure areas, including mapping of all currently closed/restricted areas (e.g., Stellar sea lion closures, BOF trawl closures, etc). (Council motion 10/04)

- Alternative 1: Status Ouo (no bycatch controls).
- Alternative 2: Trigger bycatch limits for Tanner crab. Specific areas with high bycatch (or high
 - by catch rates) are closed to flatfish trawling for the remainder of the year if or when a trigger limit is reached by the flatfish fishery.
- Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates
 - of Tanner crab.
- Alternative 4: Voluntary bycatch coop for hotspot management.

Red King Crab

Alternative 1: Status Quo (no bycatch controls).

Alternative 2: Trigger bycatch limits for red king crab. Specific areas with high bycatch (or high

bycatch rates) are closed to flatfish trawling (and potentially other areas for P. cod longline and pot gear) for the remainder of the year if or when a trigger limit is

reached by the fishery.

Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates

of red king crab.

Alternative 4: Voluntary bycatch coop for hotspot management.

Other King Crab

Alternative 1: Status Quo (no bycatch controls).

Alternative 2: Trigger bycatch limits for other king crab. Specific areas with high bycatch (or high

bycatch rates) are closed to flatfish trawling (and potentially other areas for P. cod longline and pot gear) for the remainder of the year if or when a trigger limit is

reached by the fishery.

Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates

of other king crab.

Alternative 4: Voluntary bycatch coop for hotspot management.

Trigger limits as proposed under alternative 2 would close designated areas (as yet to be defined) to trawling in specified fisheries once a bycatch limit has been reached. For instance, for Chinook salmon, once a bycatch limit has been reached, the designated area closure would be closed to pollock fishing for the remainder of the year. Likewise for Tanner crab, once the bycatch limit has been reached, the area closure for the flatfish fishery would go into effect for the remainder of the year. For other salmon, trigger limits may also be considered for flatfish trawl fishery (in addition to pollock trawl fishery) given the relative contribution of bycatch by that fishery.

The proposed alternatives using trigger closures would work similar to other existing PSC management measures. Currently in the GOA, PSC limits exist in the flatfish fishery for halibut only, whereby if a given apportionment is reached within a specified season, the flatfish fishery is then closed for the remainder of that season. Trigger bycatch limits as proposed here would be similar, but would not close the area-wide flatfish fishery. Instead, designated high bycatch or hotspot areas would be closed to the fishery if the given trigger bycatch limit was reached while the fishery was being prosecuted. Similar trigger closures have been implemented in the Bering Sea to control the bycatch of Tanner crab, snow crab (*C. Opilio*) and red king crab (Witherell and Pautzke 1997).

Year-round and seasonal trawl closures, such as those as proposed under alternative 3, have also been used in both the GOA and BSAI fisheries to control the bycatch of prohibited species. Currently in the GOA, trawl closure areas have been implemented around Kodiak Island to protect red king crab. Specific areas are designated as Type I, Type II and Type III areas depending upon the importance of the area to concentrations of red king crab at various life stages. Type I closures are closed year-round to all non-pelagic trawling. Type II areas are closed during the molting period for red king crab (February 15-June 15), while Type III areas are closed only during specified 'recruitment events' and are otherwise opened year-round. These closures are delineated in green (year-round) and red (seasonal) in figure 18.

Alternative 3 for red king crab, other king crab and Tanner crab proposes year-round bottom trawl closures as opposed to seasonal closures given the relationship between the timing of the flatfish fishery and the bycatch of Tanner crabs (Figures 7 and 8). Further examination of the timing of the red king crab and other

king crab bycatch would need to be done in order to evaluate the appropriate temporal nature of the proposed closure.

For salmon, however, the highest bycatch is seasonal and is tied to the timing of the walleye pollock fishery. Here seasonal closures of hot spot locations could possibly be examined rather than year-round closures. Seasonal salmon closures have been utilized to control salmon bycatch in the BSAI groundfish fisheries, although in recent years these closures have been problematic and may need to be revised due to increased bycatch of salmon in the BSAI pollock fishery in 2003 and 2004. The Council is currently evaluating alternatives means to reduce salmon bycatch in the BSAI, including potentially repealing the existing closure areas and allowing the fleet to work within their cooperative structure to control bycatch. Currently the measures in the BSAI are closures areas which are triggered upon the attainment of a specified limit in the designated fishery. The Chum Salmon Savings Area in the eastern Bering Sea is closed to trawl fishing for all of August, and can be extended though October 14 if specified chum salmon bycatch limits are reached in the trawl fishery. For Chinook salmon, the Chinook Salmon Savings Areas are closed when annual chinook salmon bycatch limits are reached by the trawl fishery (similar to a seasonal closure under the trigger bycatch limits as described for alternative 2). Given that the Council is currently looking to revise the closure areas in the BSAI, any measures evaluated for bycatch reduction in the GOA should consider and build upon lessons learned in the BSAI.

Alternative 4 for both crab and salmon species proposes enacting a bycatch pool or cooperative for hotspot area management. This alternative is designed after the current BSAI bycatch cooperatives in use by industry to control bycatch in the pollock fishery. Currently in the BSAI, a program of voluntary area closures exists with selective access to those areas for fleets which demonstrate success in controlling bycatch (Haflinger 2003). Voluntary area closures can change on a weekly basis and depend upon the supply and monitoring of information by fishermen. The sharing of bycatch rates among vessels in the fleet has allowed these bycatch hotspots to be mapped and identified on a real-time basis, so that individual vessels can avoid these areas (Smoker 1996, Haflinger 2003).

A voluntary cooperative program could be modeled after the AFA catcher vessel Intercooperative Agreement between the nine catcher vessel cooperatives in the BSAl pollock fishery (Gruver 2003). Some aspects of this inter-cooperative agreement which would be useful to include in a GOA coop alternative include provisions for: allocation, monitoring and compliance of the PSC caps amongst the catcher vessel fleet; establishment of penalties for coops which exceed allocations; promoting compliance with PSC limits while allowing for maximum harvest of allocated groundfish; and the reduction of PSC bycatch in the groundfish fishery. For the BSAI cooperative, Sea State is retained to provide data gathering, analysis and reporting services to implement the bycatch management agreement, and in doing so provides timely hot spot reports to the fleet as well as summaries of bycatch characteristics, trends and/or fishing behaviors which may be having an effect on bycatch rates (Gruver 2003). Fleets are notified of avoidance areas for chinook salmon and have previously agreed within the cooperative to avoid these areas as notified. Cooperative agreements in the BSAI vary between salmon species, with bycatch rates calculated for use in monitoring access to the Chum Salmon Savings Area while hot spot avoidance areas are utilized for chinook salmon bycatch reduction. Specific cooperative measures would need to be created for the characteristics of the GOA groundfish fishery, however measures from the BSAI cooperatives may prove useful in designing appropriate programs for salmon and crab bycatch co-ops in the GOA.

Implications and coordination with GOA groundfish rationalization initiative

Rationalization programs, such as IFQ's or cooperatives, may also provide additional benefits for controlling bycatch. Rationalization programs eliminate the race for fish, thereby allowing fishermen to modify fishing practices (e.g., time and areas fished, gear modifications, etc.) to reduce bycatch, whether in response to regulatory requirements or on a voluntary basis. In a rationalized fishery, members are more likely to actively

exchange information to avoid areas of high bycatch rates. In an absolute sense, rationalization programs would be expected to reduce effort, thereby reducing the amount of time gear is in the water and the probability of intercepting bycatch species.

If the Council elects to limit salmon and crab bycatch in the Gulf, those limitations will need to be coordinated with any rationalization program. Limits on salmon and crab could be applied as a fleet cap with rules similar to the current halibut PSC rules. This overall limit would have the potential to perpetuate a race for fish, if the cap is binding. Optionally, salmon and crab bycatch shares could be allocated to individuals or cooperatives. A system for allocation and management of these shares would need to be developed.

Next Steps

The alternatives proposed by the Council serve as a starting point for discussion as to how bycatch measures might be conceived of and analyzed for the GOA. At this point, no specific areas or bycatch limits have been suggested. If the Council initiates analysis of the proposed alternative bycatch control measures, we would examine the costs to the fishing industry, as well as the potential conservation benefits, if any, resulting from controlling bycatch of Chinook salmon, other salmon, red king crabs, other king crabs and Tanner crabs. At this time, we have not estimated the effects of bycatch on population size to see if a conservation issue exists. Assessment of the impacts of bycatch on population size will require additional data inputs such as population size estimates, the size (and age) of crabs and salmon taken as bycatch, and estimates of discard mortality and unobserved mortality. Bycatch by fishery, abundance estimates by location and closures are provided as examples of available data should the Council initiate analysis of alternative means of bycatch reduction for salmon and crab species in the GOA. If an analysis is initiated, more detailed data and analysis by area and fishery would occur.

LITERATURE CITED

- ADF&G 2002. Annual Management Report for the Shellfish Fisheries of the Westward Region, 2001. Alaska Department of Fish and Game. Regional Information Report, No. 4K02-54. ADF&G, Division of Commercial Fisheries, 211 Mission Road, Kodiak, Alaska. 99615.
- Coon, C., Heifetz, J, and T.C. Shirley. (in press) Spatial and Temporal Patterns of Bottom Trawling in the Gulf of Alaska and Aleutian Islands During 1990-2000. NOAA Technical Memorandum.
- Gharret, A.J., V.A. Brykov, S. Hall, and Z. Li. 2005. Genetic Divergence, Phylogeography, and Recognition of Asian and North American Chinook. Paper presented at the Marine Science in Alaska: 2005 Symposium. Anchorage, Alaska January 24-25, 2005.
- Haflinger, K. E. 2003 (in press). Reducing Bycatch Through Avoidance: Utilizing near-real-time catch sampling and analysis of spatial patterns in occurance of bycatch species to provide fleets with the information needed to avoid bycatch. Abstract of poster presented at the conference "Managing Our Nation's Fisheries: Past, Present, and Future".
- Hartley, M. 2003 (in press). Effects of Rationalization. Abstract of poster presented at the conference "Managing Our Nation's Fisheries: Past, Present, and Future".
- Hiatt, T., R. Felthoven, and J. Terry. 2001. Economic status of the groundfish fisheries off Alaska, 2000. National Oceanic and Atomospheric Administration National Marine Fisheries Service, Seattle, WA.
- Johnson, J. K. 2004. Regional Overview of Coded Wire Tagging of Anadromous Salmon and Steelhead in North America. Regional Mark Processing Center, Pacific States Marine Fisheries Commission, 205 SE Spokane Street, Suite 100, Portland, OR 97202-6413.
- Karp, W. A., and H. McElderry. 1999. Catch monitoring by fisheries observers in the United States and Canada. Pages 261-284 in C. P. Nolan, editor. Proceedings of the international conference on integrated fisheries monitoring. Food and Agriculture Organization, Rome.
- Myers, K., R.V. Walker, N.D. Davis and J.L. Armstrong. 2004. High Seas Salmon Research Program, 2003. SAFS-UW-0402, School of Aquatic and Fishery Sciences, University of Washington, Seattle. 93p.
- NMFS (National Marine Fisheries Service). 2001. Steller sea lion protection measures final supplemental environmental impact statement. NMFS Alaska Region, Juneau.
- NMFS (National Marine Fisheries Service). 2003. Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska. Preliminary Draft dated September 2003. NMFS, Alaska Region, Juneau.
- NPFMC (North Pacific Fishery Management Council). 1995a. Environmental Assessment / Regulatory Impact Review for amendment 21b to the fishery management plan for the groundfish fishery of the Bering Sea and Aleutian Islands. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 1995b. Environmental Assessment / Regulatory Impact Review for amendment 35 to the fishery management plan for the groundfish fishery of the Bering Sea and Aleutian Islands. North Pacific Fishery Management Council, Anchorage.

- NPFMC (North Pacific Fishery Management Council). 1999. Environmental Assessment / Regulatory Impact Review for amendment 58: An amendment to further reduce chinook salmon bycatch in groundfish trawl fisheries of the Bering Sea and Aleutian Islands. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2003. Draft discussion paper on the Status of Alaska Fisheries as part of the presentation to the June 2003 NPFMC on preliminary GOA Rationalization analysis. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2004a. Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Assessment for a Fishery Management Plan Amendment to Establish a New Program for Observer Procurement and Deployment in the North Pacific. NPFMC, 605 West 4th Avenue, Anchorage, AK. 99587.
- NPFMC (North Pacific Fishery Management Council). 2004b. Stock Assessment and Fishery Evaluation (SAFE) Report for the King and Tanner crab stocks of the Bering Sea and Aleutian Islands region. Compiled by the Plan Team for the BSAI crab fisheries. NPFMC, 605 West 4th Avenue, Anchorage, AK. 99587.
- Smoker, J. 1996. Halibut mortality reduction in Alaska hook-and-line groundfish fisheries: a successful industry program. Pages 93-96 *in* Fisheries Bycatch: Consequences and Management. Alaska Sea Grant Collage Report AK-SG-97-02.
- Spalinger, K. 2004. Bottom Trawl Survey of Crab and Groundfish: Kodiak, Chignik, South Peninsula and Eastern Aleutians Management Districts, 2003. Regional Information Report No. 4K04-32. Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Road, Kodiak, AK 99615.
- Teel, D. J., P. A. Crane, C. M. I. Guthrie, A. R. Marshall, D. M. Van Doornik, W. D. Templin, N. V. Varnavskaya, and L. W. Seeb. 1999. Comprehensive allozyme database discriminates chinook salmon around the Pacific Rim. 25p. Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage.
- Urawa, S., M. Kawana, G. Anma, Y. Kamaei, T. Shoji, M. Fukuwaka, K. M. Munk, K. W. Meyers, and E. V. Farley, Jr. 2000. Geographic origin of high-seas chum salmon determined by genetic and thermal otolith markers. North Pacific Anadromous Fish Commission Bulletin 2:283-290.
- Urawa, S., T. Azumaya, P. Crane and L. Seeb. 2004. Origin and distribution of chum salmon in he Bering Sea during the early fall of 2002: estimates by allozyme analysis. (NPAFC Doc. 794) 11p. National Salmon Resources Center, Toyohira-ku, Sapporo 062-0922, Japan.
- Volstad, J. H., Richkus, W., Gaurin, S., and Easton, R. 1997. Analytical and statistical review of procedures for collection and analysis of commercial fishery data used for management and assessment of groundfish stocks in the U.S. exclusive economic zone off Alaska. Versar, Inc., Columbia, Maryland. 172 pp.
- Witherell, D, D. Ackley, and C. Coon. 2002. An overview of salmon bycatch in Alaska groundfish fisheries. Alaska Fishery Research Bulletin (9)1:53-64.
- Witherell, D., and C. Pautzke. 1997. A brief history of bycatch management measures for Eastern Bering Sea groundfish fisheries. Marine Fisheries Review 59(4):15-22.

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Number of chinook salmon taken as bycatch within the groundfish fisheries with groundfish Figure 1: catch (mt) by week, 2004. Number of 'other' salmon taken as bycatch within the groundfish fisheries with groundfish Figure 2: catch (mt) by week, 2004. Locations of chinook salmon caught within groundfish fisheries (2000-2002) Figure 3: Locations of chinook salmon taken as bycatch within the pollock trawl fisheries (2000-2002) Figure 4 Locations of 'other' salmon taken as bycatch within observed groundfish fisheries (2000-Figure 5: 2002) Locations of 'other' salmon taken as bycatch within observed pollock trawl fisheries (2000-Figure 6: Number of C. bairdi Tanner crab taken as bycatch by week with groundfish catch (mt) 2003 Figure 7: Number of C. bairdi Tanner crab taken as bycatch by week with groundfish catch (mt) 2004 Figure 8: Locations of C. bairdi Tanner crab caught in all groundfish fisheries (2000-2002) Figure 9: Locations of other Tanner crab caught in all groundfish fisheries (2000-2002) Figure 10: Locations of red king crab caught in all groundfish fisheries (2000-2002) Figure 11: Locations of other king crab caught in all groundfish fisheries (2000-2002) Figure 12: Red king crab population estimates (from ADF&G trawl surveys) Kodiak District 1994-Figure 13: 2004 Figure 14: Red king crab population estimates (from ADF&G trawl surveys) Alaska Peninsula District 1994-2004 C. bairdi Tanner crab population estimates (from ADF&G trawl surveys) Kodiak District Figure 15: 1994-2004 C. bairdi Tanner crab population estimates (from ADF&G trawl surveys) Chignik District Figure 16: 1994-2004 Existing fishery closures within the Gulf of Alaska Fishery Management Plan Figure 17: Locations where ADF&G trawl surveys for Tanner and king crab Figure 18: Locations of red king crab abundance (2001 ADF&G survey) and observed bycatch of red Figure 19: king crab in groundfish fisheries (1993-2002)

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Figure 21:	Locations of red king crab abundance (2003 ADF&G survey) and observed bycatch of red king crab in groundfish fisheries (1993-2002)
Figure 22:	Locations of red king crab abundance and bycatch rate of red king crab per mt of groundfish in the shallow water flatfish trawl fishery
Figure 23:	Locations of red king crab abundance and bycatch rate of red king crab per mt of groundfish in the deep water flatfish trawl fishery
Figure 24:	Locations of red king crab abundance and bycatch rate of red king crab per mt of groundfish in the Pacific cod trawl fishery
Figure 25:	Location of C. bairdi Tanner crab abundance (2001 ADF&G survey)
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Figure 27:	Location of C. bairdi Tanner crab abundance (2003 ADF&G survey)
Figure 28:	Location of <i>C. bairdi</i> Tanner crab abundance (2002 ADF&G survey) and observed locations of Tanner crab bycatch within the flatfish trawl fisheries (2000-2002)
Figure 29:	Location of <i>C. bairdi</i> Tanner crab abundance (2002 ADF&G survey) and observed locations of Tanner crab bycatch within the shallow water flatfish trawl fisheries (2000-2002)
Figure 30:	Location of <i>C. bairdi</i> Tanner crab abundance (2002 ADF&G survey) and observed locations of Tanner crab bycatch within the deep water flatfish trawl fisheries (2000-2002)
Figure 31:	Location of <i>C. bairdi</i> Tanner crab abundance (2002 ADF&G survey) and observed locations of Tanner crab bycatch within the Pacific cod trawl fisheries (2000-2002)
Figure 32:	Overview of example areas to include as Tanner crab bycatch alternatives (provided by AMCC)
Figure 33:	Examples of proposed closures for Tanner crab alternatives, Tanner crab abundance from 2002 (ADF&G survey) and observed Tanner crab bycatch from groundfish fisheries (1993-2002)

Table 1: GOA vessels: 2000-2002 average numbers by sector, size and permit type

(from: NPFMC 2004a)

			vessels
Sector	Permit Type	Vessel class	2000-2002
Catcher Processor	Groundfish only	AFA CP>125'	0
		Pot CP < 125'	1
		Longline CP <125'	12
		Longline CP>125'	9
		Pot CP >125'	2
		Trawl CP<125'	5
		Trawl CP>125'	13
Catcher vessel	Groundfish & Halibut	AFA Trawl 60'-124'	1
		AFA Diversified Trawl <125'	3
		Non-AFA Trawl 60'-124'	14
		Longline>60'	64
		Pot >60'	29
		Fixed Gear<60'	537
		Non-AFA Trawl <60'	21
	Groundfish only	AFA Trawl >125'	1
		AFA Trawl 60'-124'	8
		AFA Diversified Trawl <125'	18
·		Non-AFA Trawl 60'-124'	20
		Longline >60'	6
		Pot >60'	36
		Fixed Gear<60'	136
		Unknown CV	7
		Non-AFA Trawl <60'	23

Table 2: Percentage of total catch that was observed (sampled by species composition) by gear type and fishery in 2001, 2000, and 1997

%	BLEND	total	catch
ob	served		

Gear	Target	2001	2000	1997
Longline	Pacific cod	14%	6%	9%
1	Rockfish	5%	3%	3%
	Sablefish	23%	22%_	8%
Pot	Pacific cod	10%	11%	3%
Trawl	Pollock	18%	25%	32%
Ì	Pacific cod	18%	12%	17%
	Deepwater flats	18%	28%	22%
	Shallow water flats ¹	19%	20%	20%
	Rockfish	39%	41%	48%
	Rex sole and arrowtooth	54%	40%	2

¹⁻includes flathead sole target

²-No comparable data in 1997

Table 3. Bycatch of Pacific salmon in Gulf of Alaska groundfish trawl fisheries, by species, 1990-2004.

		Numb	ers of Fish			
Year	Chinook	Chum	Coho	Sockeye	Pink	
1990	16,913	2,541	1,482	85	64	
1991	38,894	13,713	1,129	51	57	
1992	20,462	17,727	86	33	0	
1993	24,465	55,268	306	15	799	
1994	13,973	40,033	46	103	331	
1995	14,647	64,067	668	41	16	
1996	15,761	3,969	194	2 7	11	
1997	15,119	3,349	41	7	23	
1998	16,941	13,539°				
1999	30,600	7,529ª				
2000	26,705	10,996°				
2001	14,946	5,995°				
2002	12,921	3,218°				
2003	15,860	10,400°				
2004	17,785	5,650°				
Average (1990-2004)	19,733	17,572 ^b				
Average (2000-2004)	17,643	7,252 ^b				

^a Coho, sockeye, and pink salmon are combined with chum salmon.

^b Average chum salmon bycatch includes chum, coho, sockeye, and pink salmon.

Table 4. "Other Salmon" bycatch by month, 1993-1995, in GOA groundfish trawl fisheries.

	1993	1994	1995
January	203	3,690	2
February	919	3,950	2,007
March	213	164	39
April	227	109	1,290
May	150	0	39
June	4,927	5,956	9,928
July	48,518	18,709	42,163
August	303	15	0
September	4	1	11
October	832	4,632	9,313
November	64	2	0
December	28	0	0
Total	56,388	37,228	64,792

Table 5. Bycatch of Pacific salmon in Gulf of Alaska groundfish trawl fisheries, by target fishery, 2000-2004.

Chinook Salmon:

Fishery	2000	2001	2002	2003	2004	average (2000-2004)
Walleye pollock	18,413	9,421	5,162	4,639	13,301	10,187
Pacific cod	2,747	2,796	4,066	3,157	977	2,749
Flatfish	4,386	2,295	2,443	7,136	2,640	3,780
Other targets ^a	1,160	434	1,250	928	867	928
Total GOA	26,706	14,946	12,921	15,860	17,785	17,644

Other Salmon:

Fishery	2000	2001	2002	2003	2004	average (2000-2004)
Walleye pollock	7,450	2,741	795	6,422	606	3,603
Pacific cod	0	677	29	0	51	151
Flatfish	2,979	1,857	1,500	3,354	4,548	2,848
Other targets ^a	567	720	894	624	445	650
Total GOA:	10,996	5,995	3,218	10,400	5,650	7,252

^a Other targets include rockfish and sablefish.

Table 6: Salmon fry released by species and country in millions of fish (from North Pacific Anadromous Fish Commission)

Hatchery releases	1999	CHUM 2000	2001	1999	CHINOOK 2000	2001
U.S. (Alaska)	877.8	546.5	942.2	88.0	209.5	21.0
Canada	97.3	97.3	67.5	53.5	53.5	44.6
Russia	278.7	326.1	316.0	0.6	0.5	0.5
Japan	1867.9	1817.4	1831.2	-	-	-

Table 7. Bycatch of crabs in Gulf of Alaska groundfish trawl fisheries, by species, 1990-2004.

		Numbe	rs of Crabs	
Year	Red king	Other king	C. bairdi Tanner	Other Tanner
1993	1,012	na	55,304	na
1994	45	na	34,056	na
1995	223	na	47,645	na
1996	192	na	120,796	na
1997	18	na	134,782	na
1998	275	na	105,817	na
1999	232	na	29,947	na
2000	55	698	48,715	na
2001	47	551	125,883	na
2002	20	914	89,431	2,508
2003	59	651ª	136,769	1,428
2004	330	324ª	64,325	0
Ave. 2000-	2004 98	622	93,025	na

^a Golden king crab only.

Table 8: Bycatch of red king crab in Gulf of Alaska groundfish fisheries, by gear type and target fishery, 2000-2004

Red King Crab:

Red King Crab:					
Gear and Fishery	<u>Year:</u> 2000	2001	2002	2003	2004
Longline:					
Pacific cod	45	0	19	0	0
Sablefish	0	0	0	29	0
Pot:					
Pacific cod	7	8	10	0	31
Trawl:	_				
Walleye pollock	0	0	0	0	58
rockfish	0	0	0	59	272
Flatfish:					
DWF	0				
SWF	55	47	3	0	0
Flathead sole	0	0	17	0	0
Total GOA:	107	55	49	88	361

Table 9: Bycatch of golden king crab in Gulf of Alaska groundfish fisheries, by gear type and target fishery, 2003-2004.

Golden King Crab:

Gear and Fishery	2003	2004
Longline:		
sablefish	184	36
<u>Trawl:</u>		
Arrowtooth flounder	116	0
Flathead sole	533	0
combined flatfish	649	0
rockfish	2	324
Total Trawl	651	324
Total GOA	835	360

Table 10. Bycatch of *C. bairdi* Tanner crabs in Gulf of Alaska groundfish fisheries, by gear type and target fishery, 2000 - 2004.

C. bairdi Tanner crab:

C. <i>bairdi</i> Tanner					
Gear and Fishery	Year: 2000	2001	2002	2003	2004
Longline:					
Pacific cod	167	14	17	0	0
Other species	1	17	5	0	0
sablefish	0	0	0	20	26
Pot:					
Pacific cod	65,786	69,091	95,766	10,076	8,918
Trawl:					
Walleye pollock	1,821	11,362	774	7	2,432
Pacific cod	11,177	46,822	4,905	2,519	1,180
Flatfish:					
DWF	45	2,533	185	0	0
SWF	18,924	13,164	33,914	59,600	10,016
Flathead sole	3,015	45,269	26,924	17,330	7,275
Arrowtooth flounder	10,610	2,194	14,626	28,337	32,992
Rex sole	2,897	2,145	7,198	28,780	9,014
rockfish	226	2,394	905	183	1,416
other species	0	0	0	13	0
Total Trawl	48,715	125,883	89,431	136,769	64,325
Total GOA	114,669	195,005	185,219	146,865	73,269

Item C-2(b) February 2005

Table 11: Pacific cod observer data (1997-2004, observed vessels only) Crab bycatch numbers. Source: ADF&G.

Cod catch Year Observed trips Pots lifted Tanner Crab King crab Whole pounds Metric tons Tanner/mt king/mt Area 0.67 0.00 16.53 36,432 333 11 0 1997 Kodiak 0.97 20,418 9.26 0.43 261 4 9 Kodiak 1998 0.00 1.53 69,257 31.42 48 0 1006 Kodiak 1999 3 56.79 0.003.01 6,638 200 171 0 2001 Kodiak 1 0.05 0.00 21.53 47,453 0 South Peninsula 1998 174 0.00 40,952 18.58 0.00 0 0 240 South Peninsula 1999 0.00 0.00 126,908 57.57 0 0 2 419 2000 South Peninsula 0.88 0.00 130,771 59.32 619 52 0 2001 2 South Peninsula 0.00 0.22 10,248 4.65 0 58 2002 South Peninsula 1 0.00 13,099 5.94 0.17 30 0 South Peninsula 2004 1 0.00 3.27 28,297 12.84 42 0 268 Chignik 2003 1

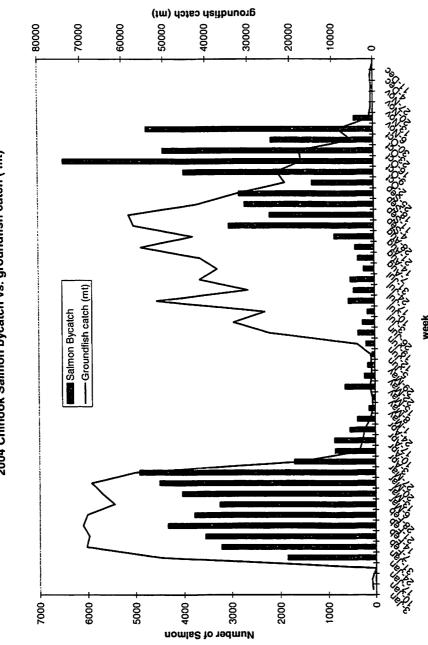


Figure 1. Number of Chinook Salmon taken as bycatch within the groundfish fisheries with groundfish catch (mt) by week, 2004.



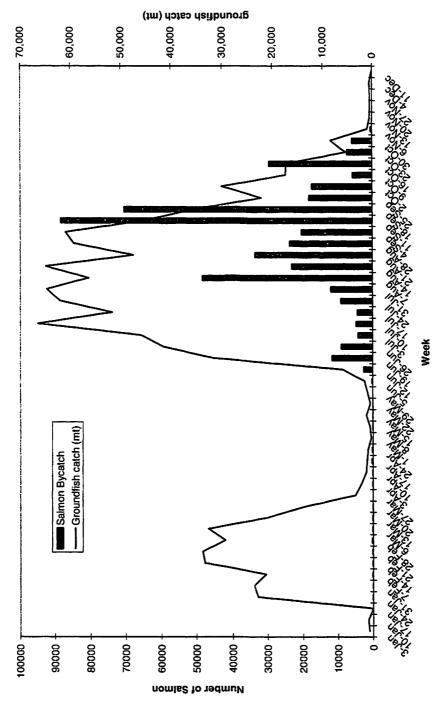


Figure 2. . Number of Other Salmon taken as bycatch within the groundfish fisheries with groundfish catch (mt) by week, 2004.

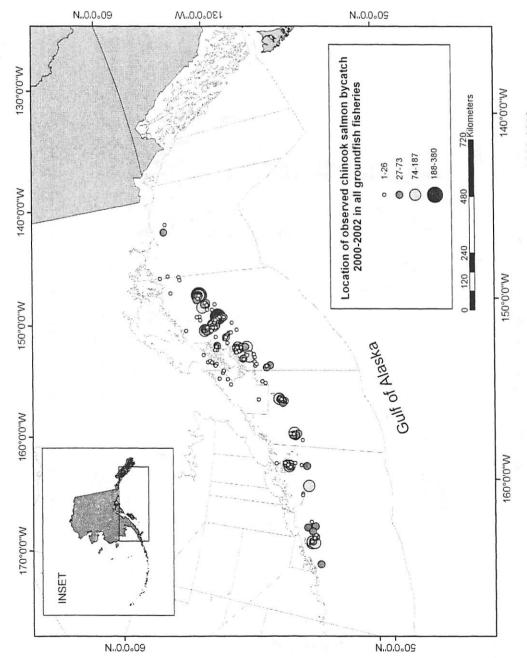


Figure 3. Locations of Chinook salmon caught within the groundfish fisheries between 2000-2002.

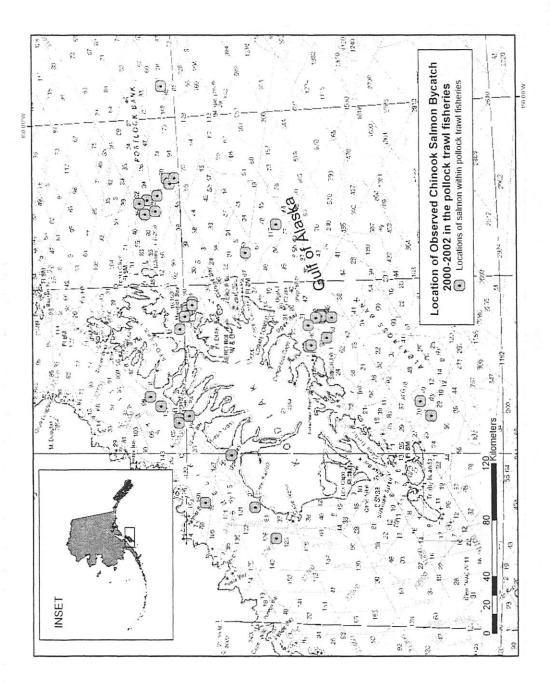


Figure 4. Locations of Chinook salmon taken as bycatch within the pollock trawl fisheries on observed fishing vessels 2000-2002.

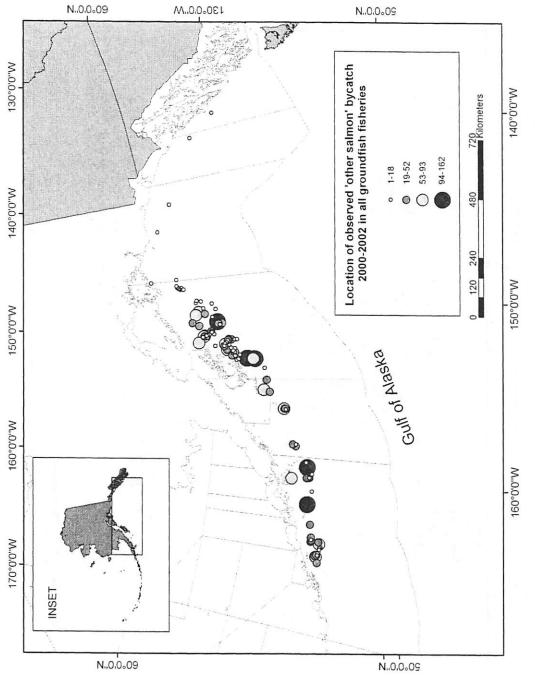


Figure 5. Locations of 'other salmon' bycatch taken within observed groundfish fisheries 2000-2002.

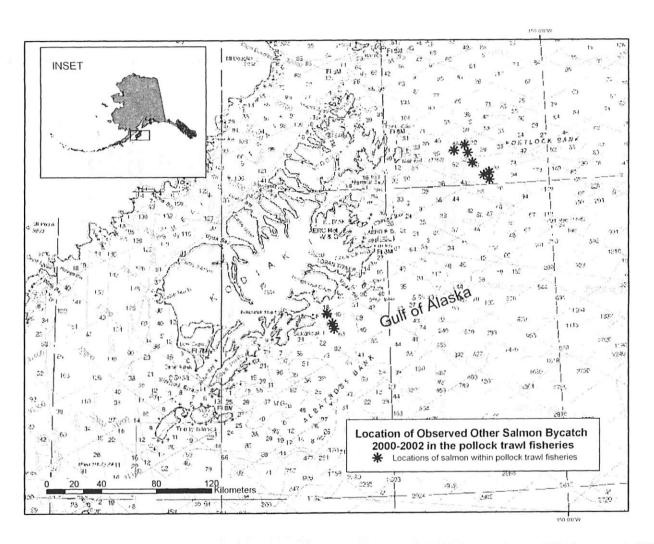


Figure 6. Locations of 'other' Salmon taken as bycatch within the pollock trawl fisheries on observed fishing vessels 2000-2002.

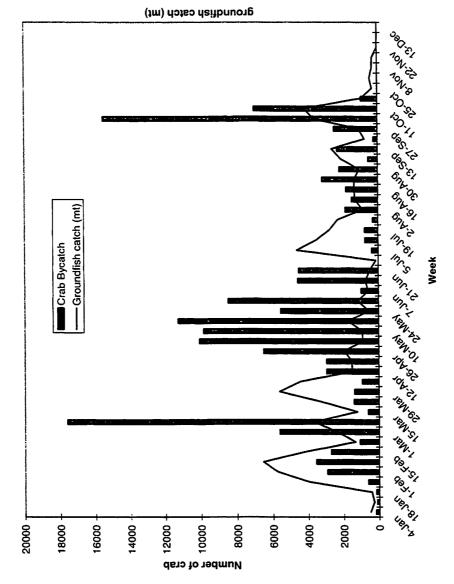


Figure 7. Number of C Bairdi Tanner crab taken as bycatch within the groundfish fisheries with groundfish catch (mt) by week, 2003.

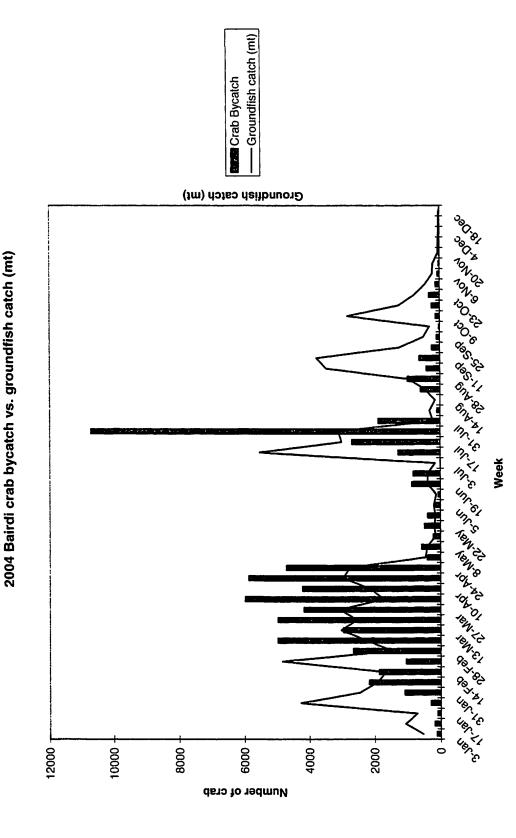


Figure 8. Number of C. bairdi Tanner crab taken as bycatch within the groundfish fisheries with groundfish catch (mt) by week, 2004.

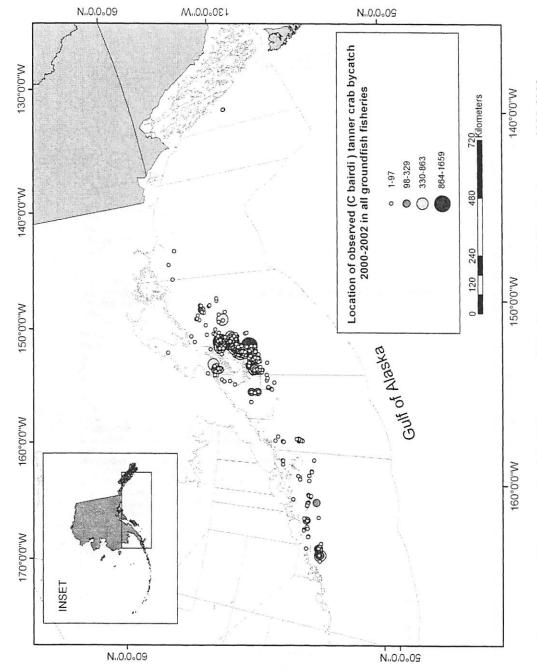


Figure 9. Locations of Tanner crab (C. bairdi) caught within the groundfish fisheries between 2000-2002.

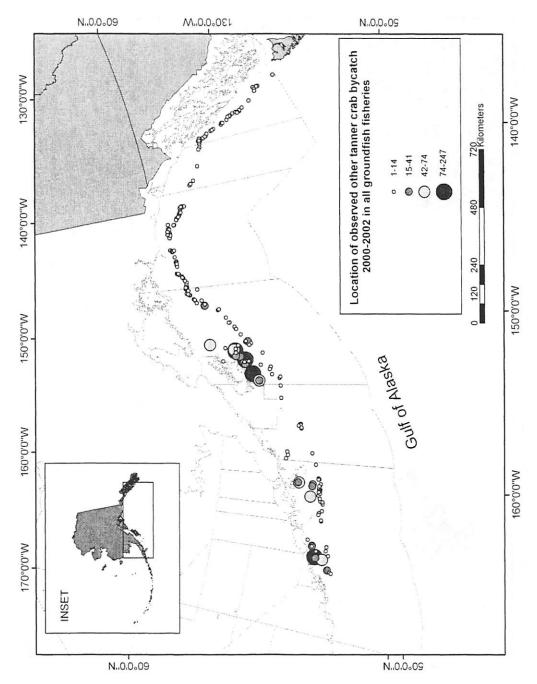


Figure 10. Locations of other Tanner crab caught within the groundfish fisheries between 2000-2002.

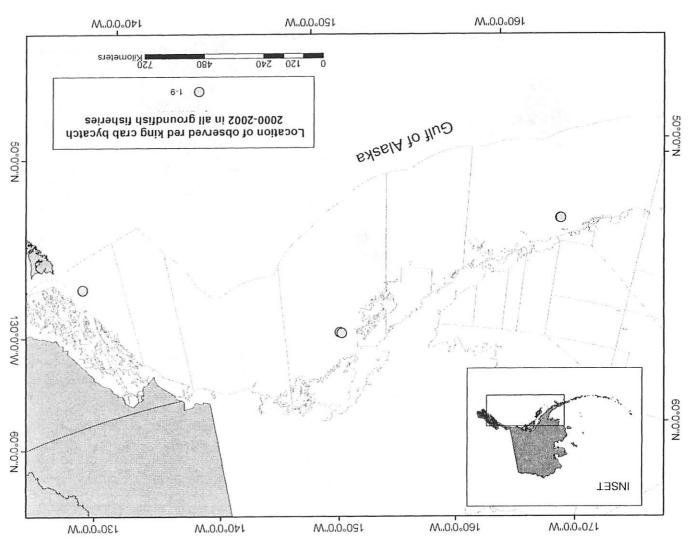


Figure 11. Locations of red king crab caught within the groundfish fisheries between 2000-2002.

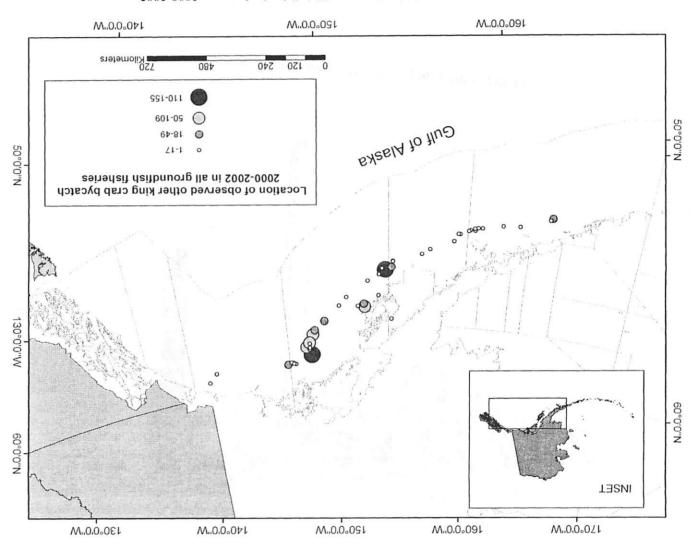


Figure 12. Locations of other king crab caught within the groundfish fisheries between 2000-2002.

Kodiak District Red King crab population estimates

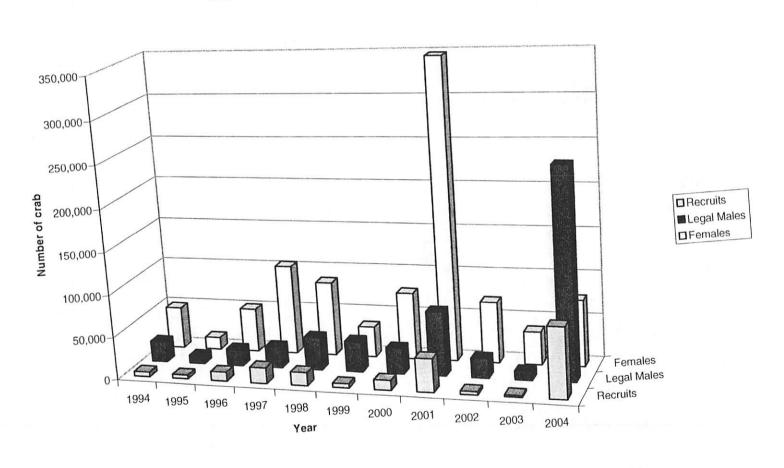


Figure 13. Red king crab population estimates Kodiak District based on ADF&G trawl surveys 1994-2004.

Alaska Peninsula Districts King crab population estimates



Figure 14. Red king crab population estimates for Alaska Peninsula based on ADF&G trawl surveys 1994-2004.

Kodiak District Tanner Crab Population Estimates

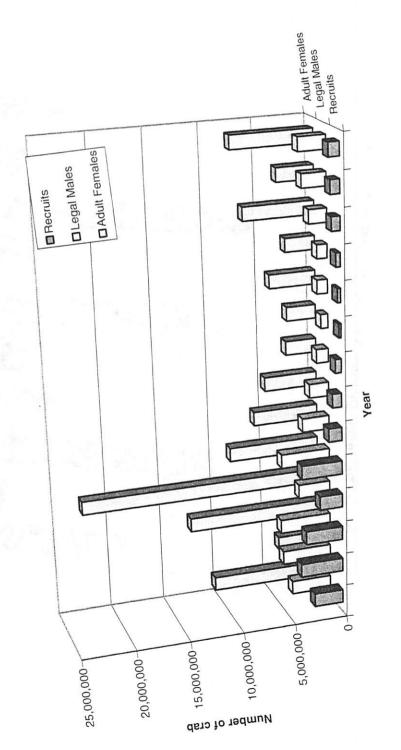
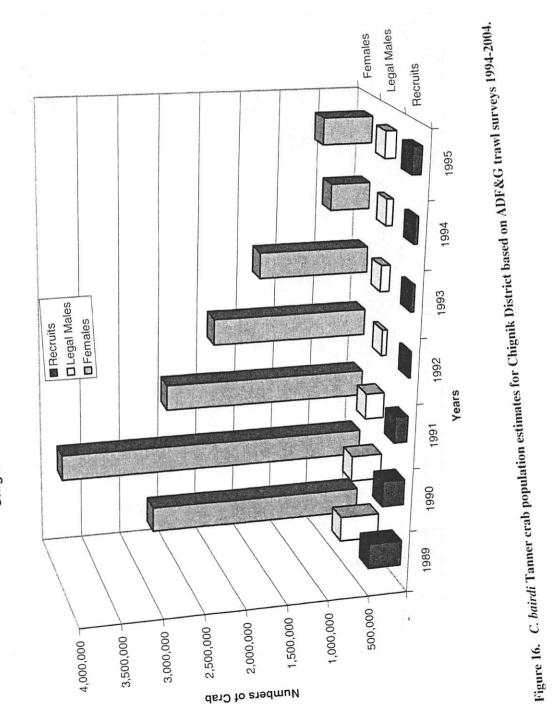


Figure ... C. bairdi Tanner crab population estimates for Kodiak District based on ADF&G trawl surveys 1994-2004.

Chignik District Tanner crab population estimates



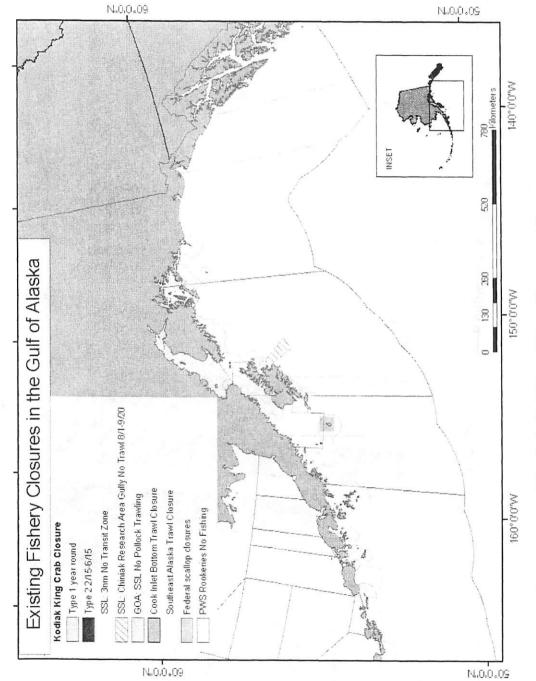


Figure 17. Existing fishery closures within the Gulf of Alaska Fishery Management Plan.

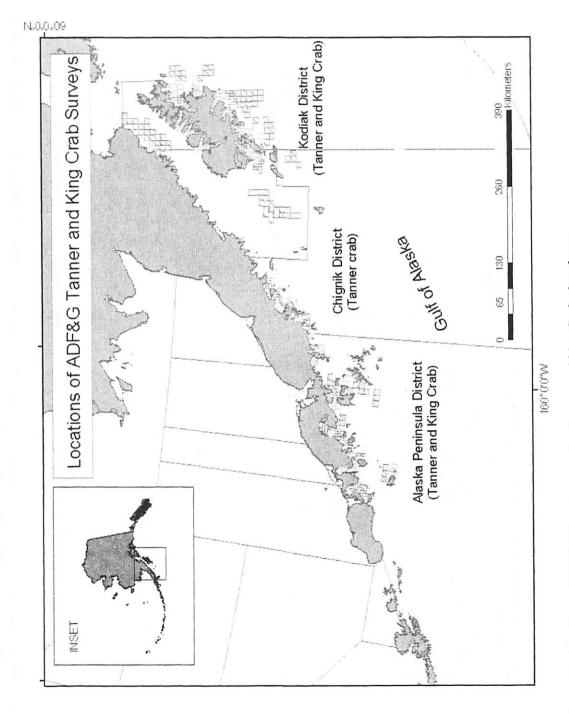


Figure 18. Locations of ADF&G trawl surveys for Tanner and king Crab abundance.

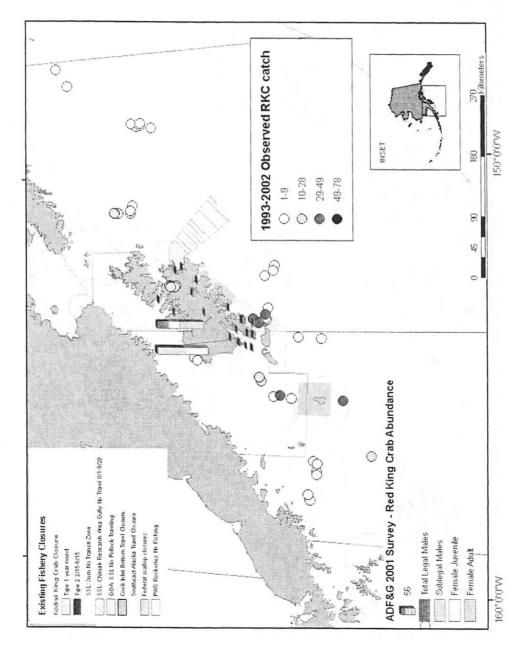


Figure 19. Locations of red king crab abundance by sex and life stage (from the ADF&G, 2001 trawl survey), and the observed bycatch of red king crab from the groundfish fisheries during 1993-2002.

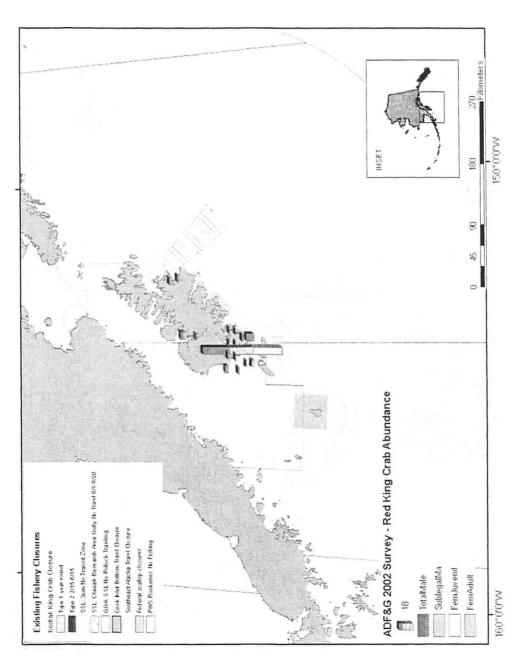


Figure 20. Locations of red king crab abundance by sex and life stage(from the ADF&G, 2002 trawl survey), and the observed bycatch of red king crab from the groundfish fisheries during 1993-2002.

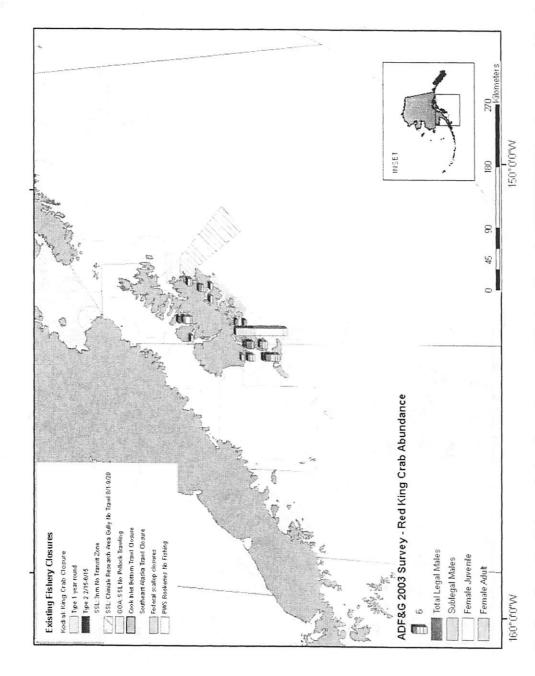


Figure 21. Locations of red king crab abundance by sex and life stage (from the ADF&G 2003 trawl survey), and the observed bycatch of red king crab from the groundfish fisheries during 1993-2002.

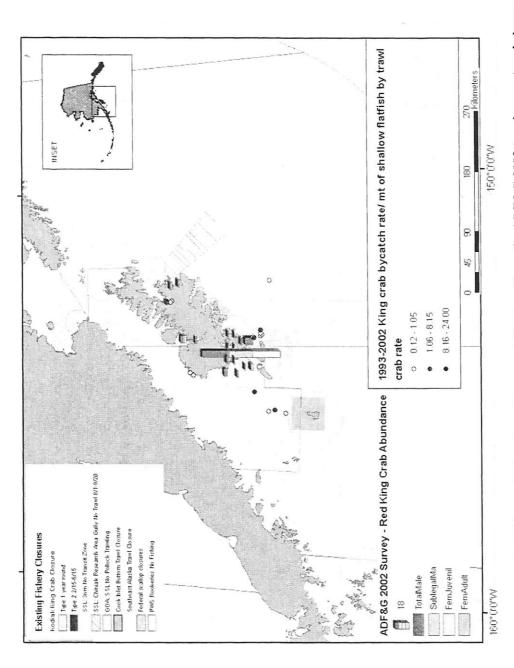


Figure 22. Locations of red king crab abundance by sex and life stage (from the ADF&G 2002 trawl survey) and observed bycatch of red king crab within the shallow water flatfish trawl fisheries 1993-2002.

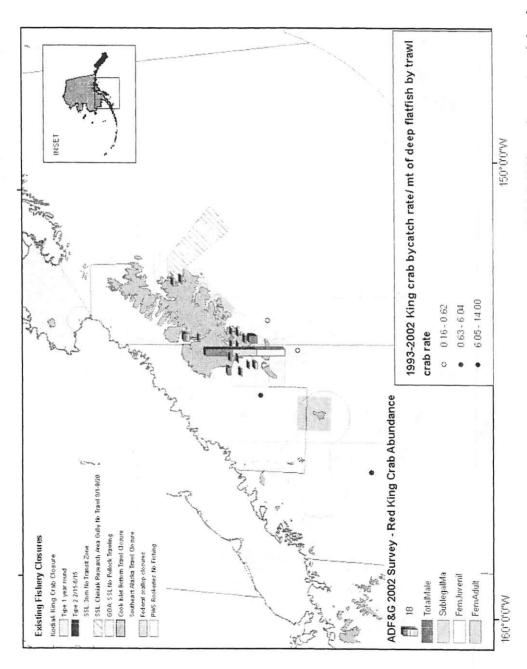


Figure 23. Locations of red king crab abundance by sex and life stage (from the ADF&G 2002 trawl survey), and the observed bycatch of red king crab within the deep water flatfish trawl fisheries during 1993-2002.

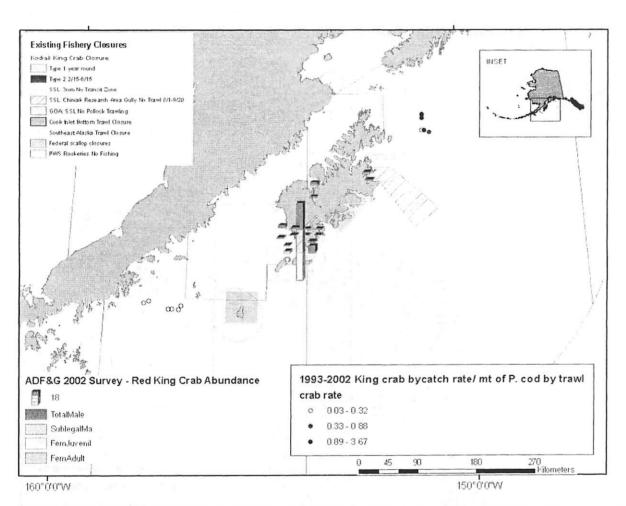


Figure 24. Locations of red king crab abundance by sex and life stage (from the ADF&G 2002 trawl survey), and the observed bycatch of red king crab within the P. cod trawl fisheries during 1993-2002.

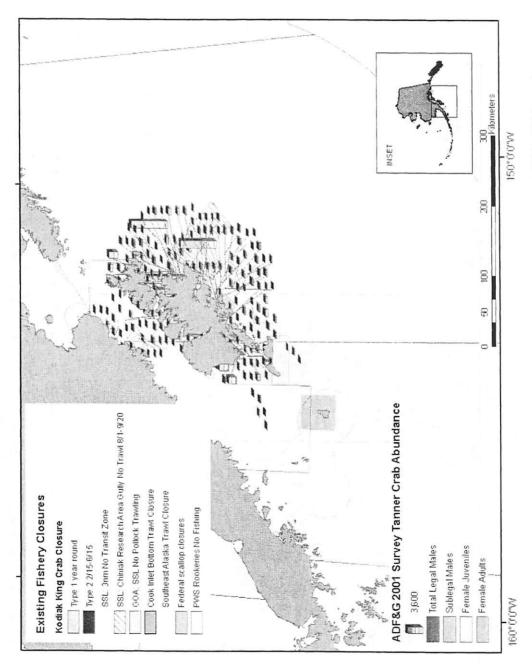


Figure 25. Locations of C. bairdi Tanner Crab abundance by sex and life stage from the ADF&G, 2001 trawl survey.

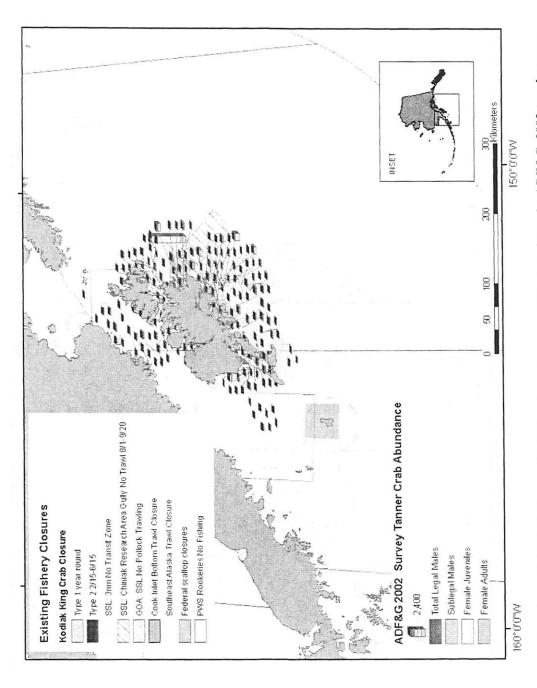


Figure 26. Locations of C. bairdi Tanner Crab abundance by sex and life stage from the ADF&G, 2002 trawl survey.

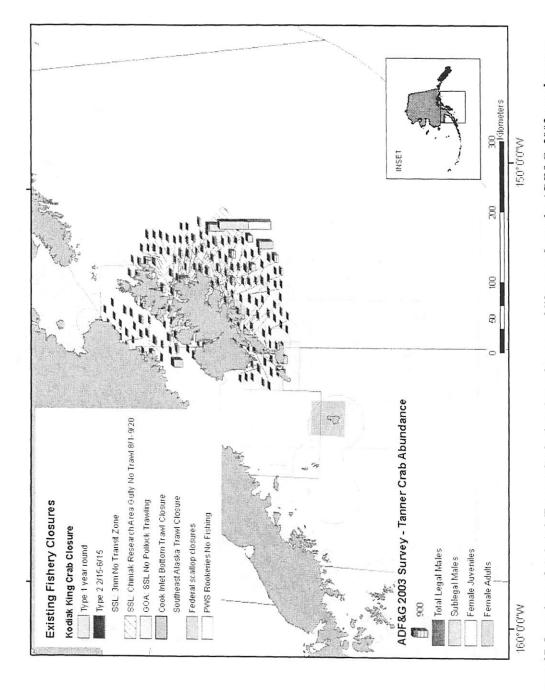


Figure 27. Locations of C. bairdi Tanner Crab abundance by sex and life stage from the ADF&G, 2003 trawl survey.

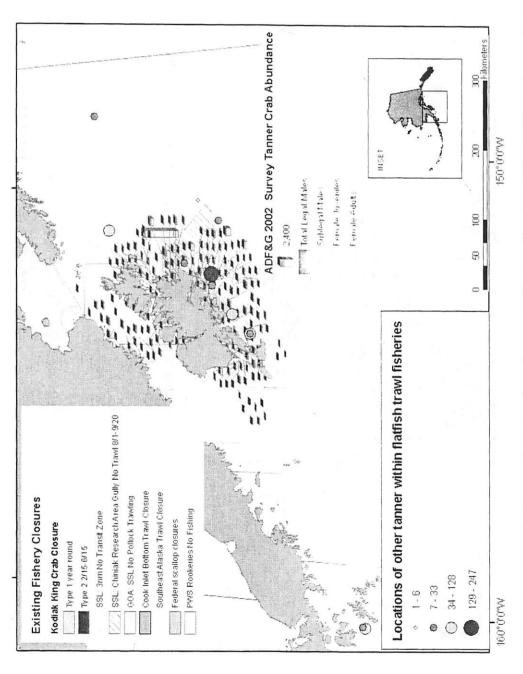


Figure 28. Locations of C. bairdi Tanner Crab abundance by sex and life stage (from the ADF&G 2002 trawl survey) and observed bycatch of C. bairdi Tanner crab within the flatfish trawl fisheries 2000-2002.

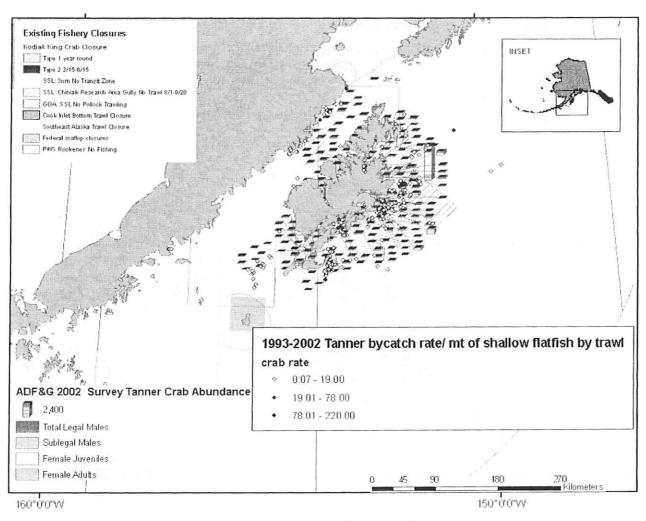


Figure 29. Locations of Tanner Crab abundance by sex and life stage (from the ADF&G 2002 trawl survey) and observed bycatch of *C. bairdi* Tanner crab within the shallow water flatfish trawl fisheries 1993-2002.

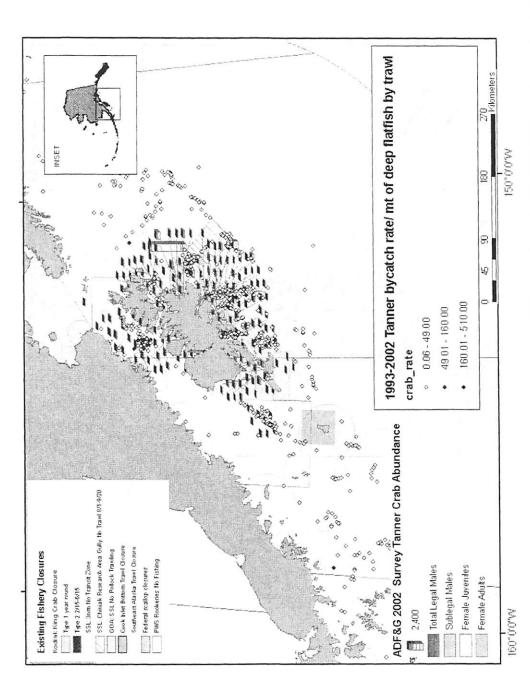


Figure 30. Locations of C. bairdi Tanner Crab abundance by sex and life stage (from the ADF&G 2002 trawl survey) and observed bycatch of C. bairdi Tanner crab within the deep water flatfish trawl fisheries 1993-2002.

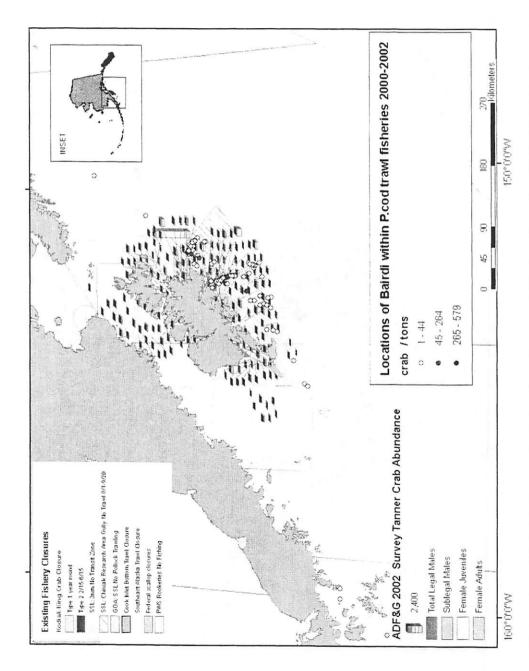


Figure 31. Locations of C. bairdi Tanner Crab abundance by sex and life stage (from the ADF&G 2002 trawl survey) and observed bycatch of C. bairdi Tanner crab within the P. cod trawl fisheries 2000-2002.

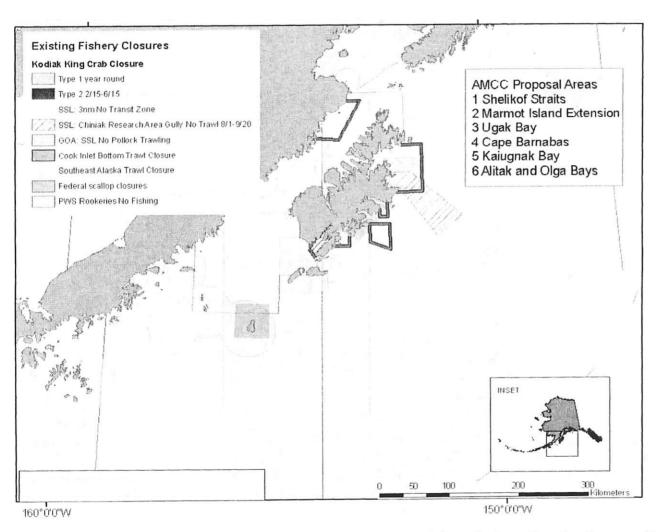


Figure 32. Overview of example closure areas to include as C. bairdi Tanner crab bycatch alternatives (locations provided by AMCC).

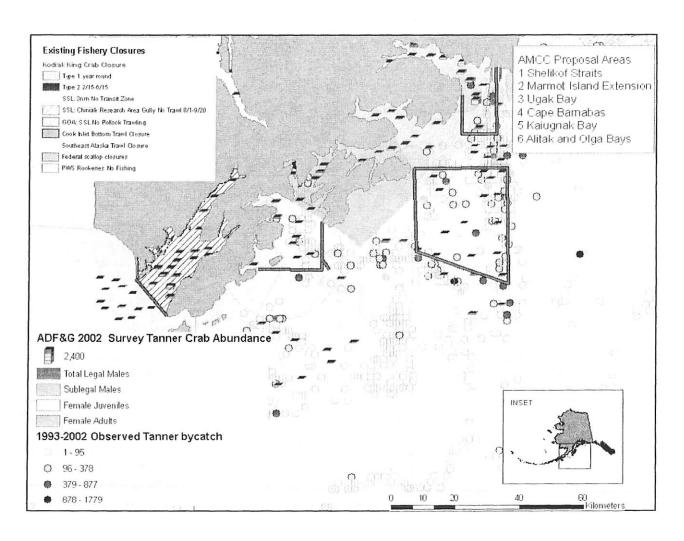


Figure 33. Examples of proposed *C. bairdi* Tanner crab bycatch alternatives with ADF&G 2002 *C. bairdi* Tanner crab abundance, and observed *C. bairdi* Tanner crab bycatch from observed groundfish fisheries 1993-2002.

GOA Rationalization Council Motion – December 2004 Salmon and Crab Bycatch

To move ahead with bycatch management as a part of GOA rationalization, the Council requests staff to have an updated discussion paper of salmon and crab bycatch management alternatives in February 2005, if possible. The council requests the following items be included:

- A set of charts showing king crab (red king and other king) and C, bairdi abundance in the GOA based on ADF&G crab surveys over the last 10 years. This information may be useful for understanding abundance trends for GOA king and bairdi crab stocks.
- A second set of charts to show the overlap of existing trawl closures and king crab and bairdi abundance areas based on recent abundance surveys. This will help the Council evaluate the effectiveness of existing sea lion and crab no trawl zones in terms of controlling crab bycatch levels.
- A thirds set of charts showing recent bairdi and king crab abundance along with fishing effort and crab bycatch rates for trawl and groundfish pot gear (separately). The charts depicting crab bycatch rates for trawl and pot gear should include bycatch rates calculated as the number of crab per ton of groundfish.

Gulf Rationalization Community Committee Report

January 28, 2005 Captain Cook Hotel, Voyager Room Anchorage, Alaska 8 am – 5 pm

Committee: Hazel Nelson (Chair), Nicole Kimball (staff), Julie Bonney, Duncan Fields, Chuck

McCallum, Pat Norman, Joe Sullivan, Chuck Totemoff, Ernie Weiss

Other participants: Rachel Baker, Phil Smith, Greg Cashen, Dan Malarkey

Summary of Formal Committee Recommendations

The committee made recommendations to modify and add to the elements and options for the Community Fisheries Quota (CFQ) Program and the Community Purchase Program (CPP). The discussion related to those recommendations is provided in the text of this report. The explicit changes recommended for the Council's December motion on Gulf Rationalization Community Provisions are provided as <u>Attachment 1</u> to this report.

I. Review and approve agenda

This is the second meeting of the Gulf Rationalization Community Committee (committee), and all committee members were in attendance. The committee approved the agenda. Staff reviewed the materials provided prior to and at the meeting. Materials included the agenda (Attachment 2), the Council's December 2004 motion, revised draft eligibility tables, public testimony from the December Council meeting, and proposed edits to the community provisions proposed by the Gulf of Alaska Coastal Communities Coalition (GOAC3).

II. Approval of the December Committee report

The committee was provided a final opportunity to provide feedback on the December committee report. One member noted an addition should be made reflecting his comments at the prior meeting. It was his view that the funding of the CFQ Program should be entirely upfront. The report captured one perspective that the CFQ allocation may serve to harm individuals with already marginal history, and funding of a portion of the community QS over time could have less impact. His perspective was that the quota share (QS) allocation method (and the vessel owners/processors receiving the largest share) could also be considered as serving to harm individuals with marginal history. Staff will make the requested addition.

III. Review of the purpose statement and options for the CFQ Program and CPP (Council motion as of December 2004)

Staff provided an overview of the revisions made to the Community Fisheries Quota (CFQ) Program and the Community Purchase Program (CPP) at the December Council meeting. The committee noted that the new language added to the purpose statement for the CPP in December (third paragraph) is not entirely consistent with the original first two paragraphs. Specifically, the original language in the purpose statement outlines the type of community the program is targeting (small, less than 1,500 population, isolated, historical dependence on groundfish). Because the Council has additional criteria proposed (e.g., population of less than 7,500) that would define eligible communities differently than that described in the purpose statement, it may need to choose a (portion of the) purpose statement at final action that aligns with the options selected. Staff expressed concern with that approach, as the purpose statement is typically expected to drive the selection of the options at final action.

The primary concerns with the CPP purpose statement are the specific references to Amendment 66 and the criteria of less than 1,500 persons in the second paragraph. The committee did not recommend explicit changes to the purpose statement, but wanted to note this concern for the Council. In addition, the committee noted that the last sentence of the second paragraph appears to be direction to staff and notice to the public: "It is the intent of the Council that staff will adjust the options and elements below to align them consistent with Amendment 66." At some point, as the Council and the committee further develop the program to consist of the necessary elements and options, this sentence may no longer be appropriate.

Some members also expressed concern with the addition of the 'population of less than 7,500' eligibility criterion in the Community Purchase Program (C 2.2 Option 2b), but the committee did not debate this issue as it was an explicit Council motion in December. Most members agreed that a larger cumulative cap should be considered under the CPP, if the 7,500 population criterion is selected and more communities (5 additional) are deemed eligible. The committee noted that they view the ownership caps added under C 2.5 as placeholders and would like the opportunity to comment on the caps as additional data is available.

Finally, there was some additional discussion about eligible communities. One member noted that communities such as Akutan and False Pass could be considered for inclusion under the Community Purchase Program. These communities are similarly situated communities to some of the other GOA communities and residents fish in both the BSAI and the GOA. The committee noted that this would likely be discussed in the analysis, but the Aleutians East Borough would need to make a specific request to the Council to change its overall stated intent to only include GOA communities, and not BSAI and/or CDO communities, in the GOA rationalization community programs.

The committee also noted that several potentially eligible communities do not seem to be distinct 'communities,' which is a typical result when using objective criteria to determine eligibility. Examples were Kodiak Station and Womens Bay, areas which are typically considered part of the city of Kodiak, but which are identified as separate Census Designated Places by the U.S. Census and thus are identified as separate communities. The committee noted that the analysis would provide more information on each individual community, which would assist in identifying those that might be more appropriately combined as one community. However, several members expressed concern for deviating from the use of objective criteria, and noted that some of the other criteria (historical fishing participation) would likely eliminate some communities of concern.

IV. Administrative entity representing communities

The committee received GOAC3's (Duncan Fields) proposed edits to the community provisions prior to the meeting. The committee agreed to review the handout at this time, as it generally follows the remaining agenda items and is more comprehensible to address in order. Overall, the proposed edits were intended to reflect the community quota entity (CQE) form of management that was established under the halibut/sablefish community quota program. While the Gulf CFQ Program is admittedly different, the proposal uses the existing CQE management structure in order to take advantage of administrative efficiencies. The concept is that the overall CFQ management (administrative) entity that holds and manages Gulf groundfish CFQ has a Board of Directors that is comprised of representatives from each eligible community CQE. It is implicit that a community must have formed a CQE in order to participate in the Gulf CFQ Program.

The committee discussed GOAC3's proposed edits and a new section on the Board membership of the Gulf administrative entity (or entities). The committee emphasized fair representation and agreed that the options for analysis should provide some mandated structure for the Board. The committee focused primarily on two options for Board structure, both of which involve representation by the CQE Boards

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under Amendment 66: 1) each eligible community provides a representative to the Board from its CQE; 2) a group of communities is represented by CQE members on a regional basis.

The committee agreed that both of these options should be included for analysis, the first of which would require that every eligible community has a member on the Board. This option would be applicable under any of the options proposed for the number of administrative entities under C 1.1. The second option divides the Gulf communities into six identifiable geographic regions (Aleutians East Borough, Lake & Peninsula Borough, Kodiak Borough, Yakutat, Chugach, Cook Inlet), and proposes a specific number of CQE representatives from each region. The committee thought that grouping communities by commonly understood geographic and native corporation regions, as opposed to fishery management areas (610, 620, 630, etc.) would facilitate better cooperation among communities and make more sense. This option would only be applicable under a Gulf-wide management entity.

Thus, the committee agreed to include an option which would reflect the following regions and representation in a 13 member Board:

- 3 representatives for Aleutians East Borough (King Cove, Sand Point, Cold Bay)
- 3 representatives for Lake and Peninsula Borough (Chignik, Chignik Lagoon, Chignik Lake, Perryville, Ivanof Bay)
- 3 representatives for Kodiak Borough (Akhiok, Aleneva, Karluk, Larsen Bay, Old Harbor, Ouzinkie, Port Lions)
- 1 representative for Yakutat
- 2 representaives for Chugach (Tatitlek, Chenega, Port Graham and Nanwalek)
- 1 representative for Cook Inlet (Seldovia, Seldovia Village, Tyonek, Point Mackenzie, Susitna, Halibut Cove, Beluga)

The committee also discussed what happens if a community is not satisfied with how the administrative entity is functioning. For example, would a community have the opportunity to opt out of the overall management entity and manage its own CFQ? The committee discussed that under the Community Purchase Program (similar to Am. 66) there remains the ability of each community to determine how it wants to organize itself to purchase Gulf groundfish quota. The CPP program is different from the CFQ Program in that each community raises its own capital to purchase groundfish quota on the open market. In contrast, the CFQ Program represents an initial allocation, and the Council has stated its intent to have one or a few administrative entities, so that the CFQ is allocated directly to one or more entities and not thirty or so individual communities. If a community is dissatisfied with how the Board is operating under the program, it can work on those issues internal to the management entity, and always has the ability to raise issues in the Council forum. The committee agreed that the concern lies in protecting the interests of all communities in the process.

The committee also discussed the concern of varying population estimates reported by the U.S. Census and other sources. The current options use the U.S. Census as a population source, in order to be consistent with NOAA Fisheries (Alaska Fisheries Science Center) efforts to profile fishing communities and start from a universe of communities that are identified by the Census as cities or census designated places. The committee suggested having the analysis provide community population data reported by the State Department of Labor for comparison. The committee also agreed that the Council should approve a set of eligible communities at final action, and those communities would remain eligible unless the Council approves a regulatory amendment to modify the list of communities. Communities not determined eligible at final action could petition the Council to be added through a regulatory amendment.

V. Funding of the CFQ Program

While there was strong support from several committee members at the last committee meeting to provide the full allocation to the CFQ Program upfront, some alternatives to that approach for at least a portion of the CFQ warranted discussion. The committee discussed GOAC3's proposed options and a new section on "Timing of the CFQ Allocation," which would address both how the allocation to the program would be provided (whether through initial allocation or some other method) and the period of time it would take to allocate the entire amount of CFQ (5%, 10% or 15%) to the program should a step-wise approach be selected.

If the Council does not fund the CFQ program entirely upfront, the committee discussed two ways to incrementally increase the CFQ program allocation. One approach was to divert a portion (5% or 10%) of each individual holder's QS upon first transfer (sale) and allocate that QS to the CFQ Program. This would only affect holders who sold (and likely bought) their QS, as individuals either sell out of the groundfish fishery or reposition themselves in the rationalization program. Similar to the halibut/sablefish IFQ Program, the expectation is a significant amount of QS would be transferred in the first several years of the rationalization program. Staff will provide this data from the halibut/sablefish IFQ Program for the next meeting, as well as the ratio of individual holders to the number of transfers.

The committee also discussed diverting a portion of a holder's QS upon a *lease*, but agreed the issue was increasingly complicated by the potential duration and complexity of leases in a multi-species fishery. It would also not be consistent with the concept of capturing a portion of the potential 'windfall' gain from those that are selling off their QS, and impair the efficiencies of the cooperatives. The committee noted that while basing the approach only on transfers provides an incentive for a holder to lease QS instead of sell it, the Council motion for the general rationalization program has multiple options for addressing leasing and an owner-on-board policy. Phil Smith (RAM) noted that not all transfers of QS result in payment; many transfers of halibut/sablefish IFQ have been 'gifted' transfers between family members. The committee agreed an option should be provided to exempt 'gifted' transfers between immediate family members. Some members also voiced concern with the extended time it may take to 'fund' the CFQ Program in full by relying only on transfers of QS (and not also leases).

The second overall approach was to create new quota share incrementally each year by adding new QS to the QS pool(s), effectively 'diluting' the quota share pools for all QS holders and issuing the new QS to the CFQ Program. Phil Smith provided a brief description of how this process might work. Each holder's QS in a pool would be reduced by equal shares in order to create the QS allocated to the CFQ Program on an annual basis, until the CFQ Program is funded to its entire 5%, 10% or 15%. The interest in this approach stems partially from the idea that it may have less of an impact on individual holders, since the full value of a rationalized fishery may not be evident in the first few years of the program.

The committee endorsed analyzing both concepts, as both models have different impacts on the fleet and communities eligible under the CFQ Program. The discussion led the committee to combining the approaches so that each year the CFQ Program would be guaranteed a minimum of 20% of their remaining CFQ allocation (if 100% of the CFQ is not allocated in the first year). In effect, the CFQ Program would be guaranteed its full allocation after 5 years, but could be fully allocated sooner depending on the number and amount of transfers (the 20% guarantee represents a minimum amount). The committee agreed that because the QS transfer pattern is uncertain, and cannot be assumed to be similar to the halibut/sablefish experience, a drop-dead date of five years should be provided for full implementation.

The committee thus agreed that the option should provide for a (5% or 10%) reduction of an individual holder's QS upon first transfer, and then if the program does not reach its annual allocation (20% of the remaining allocation per year for 5 years) through transfers, the remainder

would be 'funded' by creating new QS and adding it to the QS pool(s). The amount of new QS needed to make up the difference is expected to be relatively small, but would depend on the number and amount of QS transfers per year, as well as the amount of CFQ that is initially allocated to the program. The committee agreed that the analysis should include options of 33%, 50%, 66%, and 100% for the initial (year one) CFQ allocation.

VI. Determining how the quota may be used

The committee recommended specific language under C 1.5 (Harvesting of Shares) that would implement a priority for the leasing of CFQ in a specific management area (WG, CG, WY) to residents of communities located in that management area. This priority would be established as the intent, but the administrative entity would be responsible for determining how to implement it. By contrast, the committee also recommended including an explicit method (for analysis) by which the administrative entity would be required to distribute 0% - 100% of the annual harvest privileges derived from CFQ, by management area and species, equally among eligible communities located in that management area.

Individual use caps and vessel IFO caps

The committee discussed four options proposed by GOAC3 to establish individual use caps (the maximum amount of CFQ that an individual resident can lease) and vessel IFQ caps (the maximum amount of CFQ that can be fished on one vessel). One member noted that these elements were also included under Amendment 66 (50,000 lbs for each cap). They are intended to address 'fairness' issues and mitigate the concern that all of the CFQ would be used on very few vessels by very few residents. The options proposed for determining the caps were formulas and not fixed numbers: 1) no caps; 2) the same caps as applied in the general program; 3) caps equal to an approximation of what is needed for viable participation in the fishery; 4) caps equal to $1\frac{1}{2}$ times the caps in the general program.

Similar to the options in the general rationalization program, the committee agreed that the caps must be species specific. Because it is easier and less costly to gear up for fishing Pacific cod than it is flatfish, more community residents could potentially operate in that fishery. The committee agreed that at a minimum, Pacific cod should be treated differently in terms of use caps than other species, given that the goal is to sustain participation and create economic opportunity and employment in the communities. The committee proposed options to reduce the individual use cap for Pacific cod to 25%, 50%, or 75% of the selected use cap for non-CFQ quota fishermen.

Sector and Gear Designations

The committee agreed to include a provision that all IFQ resulting from QS held by communities shall be designated for use only on catcher vessels. This language tracks the intent that the committee agreed upon at its last meeting. The committee also discussed the notion of whether CFQ should be designated by gear type. The consensus of the committee was that gear designations are not appropriate for this program, and that the administrative entity will have the primary role of determining which vessels will be leasing CFQ (with several approved distribution criteria and the restrictions discussed above). The committee also noted that any quota share that is purchased by the administrative entity (if the Community Purchase Program is approved) or received through transfer (if the CFQ is not fully allocated at year one), will retain its original designations, even if they do not apply when held or used by communities.

Blocks

The committee discussed the use and appropriateness of blocks in the CFQ Program, and agreed that the intent of blocks would be effectively served by the individual use caps and vessel use caps discussed above. The committee thus agreed that blocks would be an unnecessary complication to this program.

Landing Requirements

The committee discussed the concept of requiring that community residents land fish in a specific region, such as is proposed in the general rationalization program. Because CFQ does not by nature have any associated fishing history to determine historical processing patterns, any options suggested would need to propose a method by which to establish landing designations (north/south regions) on CFQ. Some members expressed concern with maintaining market share in historical processing communities, while also wanting to provide new opportunities in eligible communities that want to expand their processing capability. The committee noted that it is difficult to make recommendations not yet knowing the distribution of QS by north/south region resulting from the overall program.

The committee primarily discussed three options: 1) no regional landing requirements; 2) regional landing requirements proportional to those established for QS in the general program; and 3) regional landing requirements for only a portion of CFQ (50% - 100%). Some committee members strongly support a regional landings requirement, while others believe it will unnecessarily serve to further restrict communities' flexibility in managing CFQ. One member emphasized the potential destabilizing effect on a small number of historical processing communities like Kodiak, if CFQ changes the pattern of landings (movement to the road system). It was noted that support for this program from the Kodiak City Council is conditioned on including some sort of regionalization that maintains the historical regional distribution of processing activity. Other members disagree generally with any characterization of 'giving' something to communities, and rather see it as the Council's decision to distribute or redistribute the use of a public resource based on a policy choice.

The committee did not come to consensus as to whether to recommend an option that allows for no regional landing requirement for CFQ. However, it was understood that the Council may select this option as a default if it does not choose to include a landings requirement in its preferred alternative. One member noted that this issue effectively only addresses the Cook Inlet and Prince William Sound areas, since there is no regionalization proposed for the western Gulf. In addition, the Council modified its motion in December, such that it only proposes to regionalize specific species in the Central Gulf, and not species in the Western Gulf or West Yakutat.

Because at least some portion of the CFQ would be initially issued, the regionalization designation for that portion could be established at the start of the program. However, the committee did not thoroughly discuss how to address CFQ that is obtained through the transfer of QS that already has a regionalization designation from an individual holder's history; specifically, whether to retain or modify that designation when the quota is held by the administrative entity on behalf of eligible communities. One member suggested using a normalization function, but the committee agreed not to discuss further details at this point.

In sum, the committee agreed to recommend two options for establishing a regional landings requirement and three suboptions to address the duration of the requirement (in perpetuity, 5 years, or 10 years). The first option would mirror the regionalization distribution in the general program, and the second would increase the flexibility for communities by only regionalizing a portion of the CFQ (50% - 100%).

VII. Determining how the funds generated from leasing community quota may be used

The committee flagged this issue at its first meeting as requiring significant discussion, as the current Council motion does not include options to address this issue. This section address three related issues: 1) restrictions on the use of funds generated by the lease of CFQ; 2) whether the administrative entity is required to distribute lease proceeds to eligible communities; and 3) the allocation basis used to distribute lease proceeds to eligible communities.

Use of Lease Proceeds by Administrative Entity

The committee discussed potential restrictions on the administrative entity's use of the funds generated by leasing CFQ. Generally, the committee discussed restricting the use of funds to: administrative expenses; distribution to member community CQEs; purchase of additional Gulf groundfish QS; fisheries related investments; and investments in economic development in eligible communities. There was committee consensus on modifying the current motion to provide options to reflect the above restrictions.

The committee also discussed whether similar options should be provided to restrict a CQE's use of these funds, if the administrative entity is allowed to distribute lease proceeds to the member communities' CQEs. While it is assumed that the CQE in each community would need to use the income to purchase QS or toward debt repayment of such purchases and administrative expenses, there may be a need to explicitly state such restrictions. Requiring limits on how the CQEs spend funds received from the CFQ administrative entity would impose an additional recordkeeping and reporting requirement on the CQEs (and an additional monitoring responsibility for NMFS), as they would be required to identify the amount of funds received from the administrative entity and how those funds were spent, distinct from the lease proceeds they receive from the lease of halibut and sablefish community quota share. In effect, however, the same restrictions would apply at both the overall management entity and the CQE level.

Some members expressed concern with the level of scrutiny applied to communities, and not similarly applied to individuals or processors, with regard to the use of funds derived from a public resource. The two issues are: 1) requiring the administrative entity to provide information to NMFS to determine that the program is being implemented the way it was intended to benefit communities, and 2) requiring that the administrative entity only spend money on specific activities. The issue discussed was primarily related to #2, in that there is continued concern with the level of 'shepherding' applied to communities and the notion that communities are treated differently in that they are told how to spend their revenues. One member also noted that it is at times helpful to have the mission statement for a program outlined so explicitly, as it contributes to meeting the goals of the program more quickly and effectively. The key is to find a balance between the bias involved with providing an allocation to an entity other than an individual or processor and the need for structure to facilitate an effective program.

Distribution of lease proceeds to member communities

The committee also recommended two options to address whether the administrative entity is required to distribute lease proceeds to member community CQEs on an annual basis, as the administrative entity may want to put a majority of funds into purchasing more quota or debt repayment. If the administrative entity is required to distribute rents annually, the committee recommended three options for a minimum amount of lease income (10%, 20%, 30%) that must be distributed (after administrative expenses of the management entity.) Thirty percent was discussed as an appropriate maximum amount, given that the intent is not to have the administrative entity act as a 'pass-through' organization, but rather as an entity with adequate capital to operate in the QS market on behalf of eligible communities.

Allocation Basis

The Council's current (December 2004) motion provides three formulas to distribute the annual harvest privileges (leasing) from the CFQ held by the administrative entity to residents of individual eligible communities. These options are not entirely consistent with the concept endorsed by the committee to allow the management entity primary responsibility to determine how to effectively lease multi-species CFQ among residents of eligible communities. The concept generally endorsed by the committee is to allow the administrative entity some flexibility in this regard, with several restrictions in regulation (e.g., that the CFQ must be fished by eligible community residents, a priority given to residents wanting to lease CFQ designated for the area in which their community is located, etc.) and a requirement to develop distribution criteria that must be submitted to and approved by NMFS prior to qualifying as the administrative entity.

Thus, given that the committee does not believe it will be effective or beneficial to the communities or the program to dictate a formula that would require that the administrative entity lease a portion of each species/type of CFQ to residents of each community on an annual basis, the committee recommended modifying the options under C 1.6 Allocation Basis in the current motion to provide methods for distributing the lease proceeds resulting from the CFQ as opposed to the privilege to fish the CFQ. Thus, while only residents of eligible communities would be fishing the CFQ, there would not be a mandate that residents from each community would have to be leased a very small portion of each species of quota in each management area on an annual basis.

In sum, the committee recommended retaining the first two formulas contained in the current Council motion under C 1.6, but applying them to the distribution of *proceeds* resulting from the lease of CFQ to community residents. This ensures that every eligible community CQE would receive some benefit under the program on an annual basis (subject to the use restrictions discussed previously), and allow flexibility for the administrative entity to manage the fishing of the CFQ more effectively and practically. The committee did not recommend retaining the third formula, as it did not seem appropriate to apply to lease proceeds. In addition, the committee recommended a new option that would allow the lease proceeds to be distributed among eligible communities at the discretion of the administrative entity (no formula). The committee thought this was an appropriate option for analysis, in the case that sufficient safeguards are developed in the program as a whole such that they are not necessary to include here.

Qualification of administrative entity

The committee recommended three options for elements that would comprise, at a minimum, an entity's application to NMFS to act as the administrative entity on behalf of eligible communities. The intent was to add some substantive elements to the Council's current motion, which only requires that an application be submitted. At a minimum, the committee recommends the report include: 1) identification of the community CQEs represented by the administrative entity; 2) allocation criteria to use when resident fishermen apply to lease CFQ; and 3) documentation of the entity's accountability to the communities.

VIII. Community Purchase Program

While the committee did have sufficient time to evaluate the elements of the CPP, it did agree to recommend several new options to C 2.5 Ownership/Use Caps. Generally, the committee recommended individual community use caps (the maximum amount of QS that each individual eligible community would be allowed to purchase) that track the individual use caps approved in the general rationalization program. Thus, while the Council currently has fixed options of 1%, 2%, and 3%, the committee agreed that additional options should be analyzed that base the individual community cap on the cap developed in the regular program, or an increase of that cap.

The committee agreed to the same approach for the options for an aggregate community cap (the maximum amount of QS that all eligible communities would be allowed to purchase cumulatively). In addition, an option of no aggregate cap was recommended, as the individual caps (and the set number of eligible communities established in regulation) would provide a default aggregate cap.

IX. Other Issues/Schedule

The committee agreed that it was a productive meeting, noting that it is valuable to have the opportunity to filter out the details of these issues with members' constituencies. The committee would like to continue its efforts, and agreed that more time is warranted to refine options as data is provided and the Council makes progress on the overall rationalization program. At a minimum, one more meeting is needed prior to the analysis, to flesh out the details of the Community Purchase Program. If the Council determines that another meeting is warranted, the committee could next meet on **February 18**.

Gulf of Alaska (GOA) Rationalization Community Committee Recommendations on the December 2004 Council Motion on Gulf Rationalization Community Provisions

(additions are in bold and deletions are stricken)

It is the Council's intent that the Community Fisheries Quota (CFQ) Program and the Community Purchase Program (CPP) be the subject of standalone staff analysis for future inclusion in GOA groundfish rationalization alternatives as appropriate. The intent is not to create these programs as a trailing amendment, but to implement them at the same time GOA rationalization goes into effect.

Bering Sea/Aleutian Islands communities (CDQ or otherwise) and communities adjacent to the Eastern GOA regulatory area Southeast Outside District (except Yakutat) will not be included in any Gulf rationalization community provision programs.

PURPOSE: The Council recognizes the importance of providing economic stability for communities historically dependent upon GOA groundfish fisheries. Consistent with the guidance provided by the Consolidated Appropriations Act of 2001, National Standard 8, and the National Research Council Report, the Council acknowledges that rationalization programs can have significant impacts on fishing-dependent communities. Community provisions are intended to address community impacts resulting from rationalization and seek to provide economic stability or create economic opportunity in fishing-dependent communities, and provide for the sustained participation of such communities.

C 1. Community Fisheries Quota (CFQ) Program

The CFQ program would allocate a percentage of the annual Federal TAC to an administrative entity that would subsequently determine how to use the annual harvest privileges according to criteria established in Federal regulation. Depending upon the structure and restrictions established, the non-profit entity would use the shares to enable eligible communities to fish the shares. CFQ will be fished only by eligible community residents and will not be leased outside of the community to be used for other economic development.

The intent of the CFQ program is to mitigate the economic impacts of Gulf groundfish rationalization on small (less than 1500), isolated GOA communities with a historical dependence on groundfish. Further, it is the intent of the program to sustain current participation and access to the fisheries by those communities.

C 1.1 Administrative Entity

The administrative entity representing one or more eligible communities must be a non-profit entity qualified by NMFS. The administrative entity shall be:

Option 1. A single Gulf-wide administrative entity

Option 2. An administrative entity for each GOA groundfish management area

Option 3. An administrative entity representing a group of communities with

common culture and history

C 1.2 Board Representation of the Administrative Entity

The administrative entity shall be comprised of a Board of Directors as follows:

Option 1. (Applicable with C 1.1 Options 1 -3). Equal board membership established by an equal number of appointed representative(s) from each Community Quota Entity's (CQE's) member communities. (Should the CQE represent more than one community, the CQE

m/s add to peg. 5 would appoint representatives to the administrative entity for each member community.)

Option 2. (Applicable with C 1.1 Option 1). A 13 member Board represented by members of CQEs by region as follows: Aleutians East Borough (3 reps); Lake and Peninsula Borough (3 reps); Kodiak Borough (3 reps); Yakutat (1 rep); Chugach (2 reps); Cook Inlet (1 rep).

C 1.32 Eligible Communities

Option 1. Population (based on 2000 U.S. Census) of less than 1,500 but not less than 25

Option 2. Geography

a. Coastal Communities without road connections to larger community highway network

b. Communities on the south side of the Alaska Peninsula that are adjacent to Central and Western GOA management areas (including Yakutat) within 5 nautical miles from the water, but not to include Bering Sea communities included under the Western Alaska CDQ program.

Option 3. Historic Participation in Groundfish Fisheries

a. Communities with residents having any commercial permit and fishing activity as documented by CFEC in the last ten years (1993 - 2002)
b. Communities with residents having any groundfish commercial permit and fishing activity as documented by CFEC in the last ten years (1993 - 2002)

Option 4. GOA (WG, CG, WY) communities eligible under GOA Am. 66 are eligible.

C 1.43 Species

Option 1. All rationalized groundfish species including PSC

Option 2. Pollock and Pacific cod and associated species necessary to prosecute the allocation of pollock and Pacific cod

C 1.54 Allocation

Option 1. 5% of annual TAC
Option 2. 10% of annual TAC
Option 3. 15% of annual TAC

CFQ awarded to a gulf-wide administrative entity cannot be permanently transferred.

C 1.6 Timing of the CFQ Allocation

Option 1. 100% of the CFQ at implementation of the program

Option 2. 66% of the CFQ at implementation Option 3. 50% of the CFQ at implementation 33% of the CFQ at implementation

Under Options 2-4, there is a guarantee that 20% of the remaining allocation to the CFQ Program will be made each year, such that all of the CFQ would be allocated to the program after a 5 year period. The following suboptions are applicable to Options 2-4:

Suboption 1. Remainder CFQ to be allocated from a 10% reduction of QS at first transfer (sale). If the annual minimum allocation has not been reached through transfer, the remainder will be 'funded' by creating new QS and adding it to the QS pool(s). i. Attenuation at first transfer of QS does not apply to gift transfers between family members (first degree of kin).

Suboption 2. Remainder CFQ to be allocated from a 5% reduction of QS at first transfer (sale). If the annual minimum allocation has not been reached through transfer, the remainder will be 'funded' by creating new QS and adding it to the QS pool(s). i. Attenuation at first transfer of QS does not apply to gift transfers between family members (first degree of kin).

C 1.75 Harvesting of Shares

Limited to residents of any eligible community.

The administrative entity may lease quota shares to community residents from any eligible community to be fished on vessels owned or leased by community residents. However, residents of eligible communities located in a specific management area (WG, CG, WY) should receive priority over other qualified applicants in the leasing of community quota used in that specific management area.

Option 1. 0% - 100% of the annual harvest rights from the CFQ owned by the administrative entity from each GOA groundfish management area, by species, would be distributed amongst qualified communities located in the management area on an equal basis.

C 1.8 Individual Use Caps and Vessel IFQ Caps

An individual leasing CFQ and use of CFQ on a vessel shall be limited as follows (caps would be species specific):

Option 1. No individual QS use caps and vessel IFQ caps for fishing CFQ
Option 2. An amount equal to the individual QS use caps and vessel IFQ caps in the rationalized Gulf groundfish fishery

Option 3. An amount equal to an approximation of what is needed for viable participation in the fishery (to be specified later)

Option 4. An amount equal to 150% of the individual QS use caps and vessel IFO caps in the rationalized Gulf groundfish fishery

Suboption (applies to Options 2-4): Use (25%, 50%, or 75%) of the selected use cap for Pacific cod.

C 1.9 Sector Designation

All IFQ resulting from QS held by communities shall be designated for use on catcher vessels.

C 1.10 Landing Requirements

Option 1. CFQ shall have regional landing requirements proportional to the regional landing requirements applied for the remainder of QS issued for that species.

Option 2. 50% - 100% of the CFQ shall have regional landing requirements Suboption a. requirements shall be in perputity
Suboption b. requirements shall be for a period of 5 years
Supoption c. requirements shall be for a period of 10 years

C 1.11 Use of Lease Proceeds by Administrative Entity

Use of lease proceeds is restricted to administrative expenses and:

- Option 1. purchase of additional quota shares
- Option 2. fisheries related investments
- Option 3. investments in the economic development and social well being of member communities
- Option 4. distribution to member community CQEs

Use of CFQ lease proceeds by member community CQEs is restricted to administrative expenses and:

- Suboption 1. purchase of additional quota shares
- Suboption 2. fisheries related investments
- Suboption 3. investments in the economic development and social well being of member communities

C 1.12 Distribution of lease proceeds to member communities

- Option 1. The administrative entity is not required to annually distribute lease proceeds to member community CQEs
- Option 2. The administrative entity is required to annually distribute lease proceeds to member community CQEs in an amount equal to or exceeding:
 - Suboption 1. 10% annual lease income after administrative expenses
 - Suboption 2. 20% annual lease income after administrative expenses
 - Suboption 3. 30% annual lease income after administrative expenses

C 1.136 Allocation Basis for Lease Proceeds

The initial allocation (harvest shares) of CFQ would be made to the administrative entity representing eligible communities.

- Option 1. Lease income would be distributed at sole discretion of administrative entity.
- Option 24. 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity lease income distributed by the administrative entity to member community CQEs would be distributed amongst qualified communities on an equal basis.
- Option 32. 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity lease income distributed by the administrative entity to member community CQEs would be distributed amongst qualified communities on a pro rata basis based on population.
- Option 3. --- 0% 100% of the annual harvest rights from the CFQ owned by the administrative entity from each GOA groundfish management area, by species, would be distributed amongst qualified communities located in the management area on an equal basis.

C 1.147 Qualification of Administrative Entity

The administrative entity must submit a detailed statement of eligibility to NMFS and the State prior to being qualified. The State may comment on the statement of eligibility but does not have a formal role. The required elements of the eligibility statement will be in regulation **but**, at a minimum, shall include:

Option 1. identification of the community CQEs represented by the management entity

Option 2. allocation criteria between regions, communities and fishermen

Option 3. documentation concerning accountability to the communities represented by the Administrative Entity.

C 1.158 Administrative Oversight

A report submitted to NMFS detailing the use of QS by the administrative entity. The required elements and timing of the report will be outlined in regulation.

C 2. Community Purchase Program

The CPP would allow a defined set of eligible communities to organize an administrative entity to purchase, hold, and use Gulf groundfish quota share within the rationalization program. In contrast to receiving an initial allocation, this provision would designate an administrative entity representing eligible communities as an eligible quota shareholder under the rationalization program, and that entity would be allowed to purchase GOA groundfish shares on the open market.

The intent of the CPP under GOA groundfish rationalization is parallel to Amendment 66 of the halibut/sablefish IFQ program: to mitigate the economic impacts of GOA groundfish rationalization on small (less than 1500), isolated GOA communities with a historical dependence on groundfish. Further, it is the intent of the program to maintain and enhance current participation and access to Gulf groundfish fisheries by those communities. It is the intent of the Council that staff will adjust the options and elements below to align them consistent with Amendment 66.

The purpose of the CPP is to provide the eligible communities with the opportunity to sustain their participation in the rationalized fisheries through the acquisition of Gulf groundfish fishing privileges.

C 2.1 Administrative Entity

The administrative entity representing a community or communities must be a non-profit entity qualified by NMFS, and may include an administrative entity established to manage CFQ.

C 2.2 Eligible communities

Option 1. Population (based on 2000 U.S. Census):

a. Less than 1,500, but not less than 25

b. Less than 7,500, but not less than 25

Option 2. Geography

a. Coastal Communities without road connections to larger community highway network

b. Communities on the south side of the Alaska Peninsula that are adjacent to Central and Western GOA management areas (including Yakutat) within 5 nautical miles from the water, but not to include Bering Sea communities included under the Western Alaska CDQ program.

Option 3. Historic Participation in Fisheries

- a. Communities with residents having any commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)
- b. Communities with residents having any groundfish commercial permit and fishing activity as documented by CFEC in the last ten years (1993 2002)
- Option 4. GOA (WG, CG, WY) communities eligible under GOA Am. 66 are eligible.

C 2.3 Qualification of Administrative Entity

The administrative entity must submit a detailed statement of eligibility to NMFS and the State prior to being qualified. The State may comment on the statement of eligibility but does not have a formal role. The required elements of the eligibility statement will be in regulation.

C 2.4 Administrative Oversight

A report submitted to NMFS detailing the use of QS by the administrative entity. The required elements and timing of the report will be outlined in regulation.

C 2.5 Ownership/Use Caps

Option 1. Individual community Gulf groundfish QS/GH cap of:

a. 1%

b. 2%

c. 3%

Option 2. Individual community Gulf groundfish QS/GH cap of:

- a. An amount equal to the individual cap in the general program by species
- b. An amount equal to two times the individual cap in the general program by species
- c. An amount equal to three times the individual cap in the general program by species

Option 3. Aggregate community Gulf groundfish QS/GH cap of:

a. 10%

b. 15%

c. 20%

d. 30%

Option 4. Aggregate community Gulf groundfish OS/GH cap of:

- a. An amount equal to the sum of the individual use caps of all eligible communities
- b. An amount equal to 90% of the sum of the individual use caps of all eligible communities
- c. An amount equal to 80% of the sum of the individual use caps of all eligible communities
- d. No aggregate cap

Gulf Rationalization Community Committee Meeting Agenda

January 28, 2005 Captain Cook Hotel, Voyager Room 4th and K Street, Anchorage 8 am – 5 pm

- I. Review and approval of the agenda
- II. Approval of the December committee report
- III. Review of the revised purpose statement and options for the CFQ Program and Community Purchase Program (current Council motion as of December 2004). Discussion of implications of revised options.
- IV. Administrative entity representing a community(ies)
 - Detailed discussion of administrative entity structure/concept proposed at previous meeting.
 - Committee recommendations on the administrative entity issue and options
 - Committee recommendations on the elements required to qualify the umbrella management entity (or entities) in the CFQ Program with NMFS
- V. Determining how the quota may be used (related to agenda item IV)
 - How will the entity decide which individual residents fish the shares: by criteria or allocation formula? What, if any, aspects should be regulated? Discuss the issue of balance between efficiency in the use of quota versus employment/harvesting of the quota by community residents (i.e., does each eligible community get a portion of the annual CFQ for use by their residents?)
 - If criteria is used, should it be standardized among administrative entities (if more than one is selected)? (e.g., residents of communities located in the management area of the quota share should receive first priority when considering applications/bids to lease CFQ located in that management area.) How should the criteria be weighted?
 - Discussion of a 'landings requirement' for quota. Should community quota be subject to a sort of regionalization component to keep processing activity in specific areas?
 - Harvest share designations (gear type): should they apply to quota held by communities? How to modify the options to reflect the committee's consensus that all community quota (CFQ or purchased) should be CV quota share?
- VI. Determining how the funds generated from the lease of community quota may be used
 - Should there be restrictions (on the umbrella administrative entity) on the use of funds generated by leasing CFQ to community residents? Should there be restrictions on the use of funds generated by leasing purchased quota, from a CQE for example, to community residents?
 - CFQ cannot be permanently transferred from a community administrative entity. Should there be any restrictions on the <u>sale</u> of quota <u>purchased</u> by a community entity under the community purchase program?
 - Recommendations to modify the current options
- VII. Funding of the CFQ Program

- Discussion of concept proposed at previous meeting ('tax on first transfer of quota')
- VIII. Discussion of how the CFQ Program and CPP program would work in combination with one another (if both were selected at final action) versus alone (if only one program were selected). For example, if communities were not allowed to purchase QS, how would that change the program elements/restrictions in the CFQ Program?
- IX. Other issues and/or committee member summary thoughts
- X. Discuss need for subsequent meetings and schedule for committee report



Office of the Mayor and Council

710 Mill Bay Road, Room 220, Kodiak, Alaska 99615

December 15, 2004

Stephanie Madsen, Chair North Pacific Fishery Management Council 605 West 4th, Suite 306 Anchorage, Alaska 99501-2252



Dear Ms. Madsen:

Enclosed is a resolution adopted by the Kodiak City Council that endorses certain elements of a Gulf of Alaska groundfish rationalization program.

The economy of the City of Kodiak is highly dependent upon the revenues generated from the Gulf groundfish fisheries by fishing and fish processing businesses, and the City of Kodiak and its residents have made extensive capital investments to support the Gulf groundfish fishing industry.

The City of Kodiak urges the North Pacific Fishery Management Council and the State of Alaska to develop and implement a fishery rationalization program for Gulf of Alaska groundfish fisheries with the elements noted in the enclosed resolution.

Sincerely,

CITY OF KODIAK

Carolyn L. Floyd

Mayor

Enclosure

c: Governor Frank Murkowski
James Clark
Alan Austerman
ADF&G Commissioner
Senator Gary Stevens
Representative Gabrielle LeDoux

CITY OF KODIAK RESOLUTION NUMBER 04-40

A RESOLUTION OF THE COUNCIL OF THE CITY OF KODIAK ENDORSING CERTAIN ELEMENTS OF A GULF OF ALASKA GROUNDFISH RATIONALIZATION PROGRAM

WHEREAS, the fishing industry has requested that the North Pacific Fishery Management Council develop a fishery rationalization plan for the Gulf of Alaska groundfish fisheries; and

WHEREAS, the effectiveness of any Gulf of Alaska groundfish rationalization plan will depend upon its extension to both the waters of the State of Alaska and to the waters off Alaska under Federal fishery management; and

WHEREAS, any rationalization plan implemented in Alaska's waters must recognize the sovereignty of the State over those waters and must comply with the State of Alaska Constitution's "least impingement" standard, and, therefore, must not create exclusive privileges to State resources of indefinite duration, nor close access to State resources to its residents; and

WHEREAS, the economy of the City of Kodiak is highly dependent upon the revenues generated from the Gulf groundfish fisheries by fishing and fish processing businesses; the employment of its resident fishermen, crew members, and fish processors; and the goods and services purchased from numerous businesses that directly and indirectly support the Gulf groundfish industry; and

WHEREAS, the City of Kodiak and its residents have made extensive capital investments to support the Gulf groundfish fishing industry, in water system expansions and improvements, port expansions and improvements, and the construction of a highly sophisticated fishing vessel fleet and extensive processing facilities; and

WHEREAS, the City of Kodiak's economic and social health is therefore intimately dependent upon the community's sustained participation in all aspects of the Gulf groundfish fisheries; and

WHEREAS, fishery rationalization could enable fishermen to more effectively address conservation concerns and improve safety at sea, and enable harvestors and processors to produce more products and products of higher value from the available resource while conducting their operations more efficiently, thereby making the fishery more competitive in world markets; and

WHEREAS, on the other hand, fishery rationalization can result in migration of landings from communities close to the affected fisheries to communities that have transportation and infrastructure advantages, such as road system access; and

WHEREAS, allocating exclusive fishing and/or processing privileges can create barriers to entry for second generation participants, disadvantage those engaged in or reliant upon the fishery who do not receive such privileges (such as new fishermen, crew members, and small scale processors), and can impair healthy competition among fishermen and processors; and

WHEREAS, as a result, while fishery rationalization could produce benefits for some participants in the Gulf of Alaska groundfish fishery, certain measures are necessary and appropriate to insure that Gulf of Alaska fishery rationalization recognizes the sovereignty of the State of Alaska over its waters, and complies with the Alaska Constitution's requirements, and that such program mitigates the potential adverse effects of fishery rationalization on communities such as the City of Kodiak and on its businesses and residents.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Kodiak, Alaska, that the North Pacific Fishery Management Council and the State of Alaska are encouraged to develop and implement a combined and coordinated fishery rationalization program for the State and Federal Gulf of Alaska groundfish fisheries, that:

- Section 1: Includes a reasonable groundfish allocation, which may be harvested and processed without holding any Federal or State dedicated access privilege, subject to restrictions that the State of Alaska may deem necessary to maintain the entry level character of such allocation.
- Section 2: Includes reasonable limits on consolidation of harvesting and (if incorporated in such program) processing privileges, and maintains a reasonable number of small and medium sized harvest privilege units, which will not be lost through consolidation.
- Section 3: Designates Federal harvesting privileges by region to reflect landing patterns similar to those occurring prior to program adoption, and requires that fish harvested under such privileges be landed in their designated region.
- Section 4: Includes a community fisheries quota program that provides an opportunity for small Gulf coastal communities to enhance their residents' participation in the Gulf groundfish fishery, on the conditions that the allocation to such program does not disrupt other Gulf of Alaska fishery dependent communities by displacing their fishermen, is required to be harvested by residents of the eligible communities, and requires that harvests made under such program be delivered on shore within the region of their allocation.
- Section 5: Includes a community purchase program that provides Gulf coastal communities with the opportunity to maintain participation by their residents in the Gulf groundfish fishery by acquiring harvesting privileges for use by their residents, on the conditions that the City of Kodiak is an eligible community, and such program includes reasonable limits on the amount of harvesting privileges that any single eligible community may hold.
- Section 6: If such rationalization program includes a processor license limitation component, the program allocates a processor license to the City of Kodiak for the Gibson Cove facility.



CITY OF KODIAK

Carolyn Hard MAYOR

ATTEST:

CITY CLERK

Adopted: December 14, 2004



CITY OF HOMER HOMER, ALASKA

Mayor/Council

N.P.F.M.C.

RESOLUTION 04-106

A RESOLUTION OF THE HOMER CITY COUNCIL EXPRESSING ITS POSITION REGARDING REGIONALIZATION; AN ALTERNATIVE UNDER CONSIDERATION BY THE NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL AS A METHOD TO ACHIEVE ITS GOALS ON GULF OF ALASKA GROUNDFISH RATIONALIZATION.

WHEREAS, the Homer City Council has expressed its support for the North Pacific Fisheries Management Council's (NPFMC) Gulf of Alaska (GOA) Groundfish Rationalization goals through the adoption of Resolution 03-142, and

WHEREAS, the Council supports NPFMC efforts to rationalize the fishery because it would promote safety at sea, provide for more effective management of the resource, and promote conservation goals by reducing by-catch and wastage, and

WHEREAS, the Council recently learned that NPFMC is considering an alternative to achieve rationalization goals called regionalization, and

WHEREAS, the regionalization alternative, as proposed, would require captains to deliver fish to the ports they historically delivered to and essentially guarantee that those ports would forever receive all fish caught within a given region that were historically delivered to that port, and

WHEREAS, the City of Homer has a long association with the Gulf of Alaska ground fisheries and the industry has historically been important to the local longline, pot and jig fleets, processors, dock workers, and the community's economy overall, and

WHEREAS, the city has large investments in fishing industry infrastructure including a high production ice plant, three large docks, a 900+ slip harbor, 24 hour open access cranes, and ample land available for additional processing capacity, and

WHEREAS, the City is well positioned to become further involved in the evolution and development of the fishing industry due to its long history with the industry, prime maritime location, outstanding port and harbor facilities, excellent airport, and location on the National Highway System.

NOW THEREFORE BE IT RESOLVED, that the Homer City Council finds that the Regionalization Alternative would present a significant barrier to free trade, and

BE IT FURTHER RESOLVED, that the Council finds that regionalization will inhibit the industry from operating as efficiently as possible, reduce our competitive position in

the world market, stifle innovation and incentives for new small scale processors, and have a negative impact on the goals of attaining the best and highest quality product, and

BE IT FURTHER RESOLVED, that the Council urges the North Pacific Fisheries Management Council to consider the following provisions when it conducts its in-depth studies on the implications and impacts of implementing this alternative.

- 1. That historical delivery data include as many years as possible, at least back as far as 1980
- 2. That the plan be market driven to the extent feasible and prudent
- 3. That open deliveries for the fixed gear catcher fleet be preserved.
- 4. That the final plan include a phase-out provision

PASSED AND ADOPTED by a duly constituted quorum of the Homer City Council this 13th day of December, 2004.

CITY OF HOMER

James Hornaday, Mayor

ATTEST

L. CALHOUN, CMC, CITY CLERK

ALEUTIANS EAST BOROUGH

SERVING THE COMMUNITIES OF

KING COVE SAND POINT AKUTAN COLD BAY FALSE PASS NELSON LAGOON



Stephanie Madsen, Chair North Pacific Fisheries Management Council 605 W. 4th Ave. Anchorage, Ak. 99501

N.P.F.M.C.

Dear Chairman Madsen,

Here is a resolution from the Aleutians East Borough regarding the Council's efforts to rationalize the Gulf of Alaska's groundfish fishery. An independent harvester fleet is crucial to the economic survival of these communities. Any changes to the management system for Gulf groundfish will have immediate impacts on the people who live and work in our communities. We respectfully request that you carefully consider these impacts as you make your way toward a final recommended alternative.

The Aleutians East Borough would also like to express our disappointment in once again being denied an opportunity to have someone representing our region participate on the advisory panel.

Thank you for your consideration.

Robert S. Juettner

Aleutians East Borough Administrator

cc Gov. Murkowski

ALEUTIANS EAST BOROUGH

SERVING THE COMMUNITIES OF

KING COVE SAND POINT AKUTAN COLD BAY FALSE PASS NELSON LAGOON

RESOLUTION 05-09

A RESOLUTION OF THE ALEUTIANS EAST BOROUGH ASSEMBLY ENDORSING SPECIFIC PRINCIPLES OF GROUNDFISH MANAGEMENT IN THE GULF OF ALASKA.

WHEREAS, the North Pacific Fisheries Management Council is considering a rationalization plan for Gulf of Alaska groundfish; and

WHEREAS, the communities of the Aleutians East Borough depend almost entirely on commercial fishing for their economic base and any reduction in the volume of fish caught and processed in the AEB will have a long term detrimental effect on the local economy; and

WHEREAS, the proposals currently being considered by the NPFMC would have major impacts on the harvesters, processors and all residents of the AEB; and

WHEREAS, at least half of the groundfish, and in the case of Pollock, as much as 75% of the harvest takes place inside state waters; and

WHEREAS, rockfish, although plentiful in the waters of the AEB, have not yet been fully established as an ongoing fishery, due to a lack of markets and willing processors; and

WHEREAS, communities in the Aleutians East Borough are limited to usually one processor per community.

NOW THEREFORE BE IT RESOLVED by the Aleutians East Borough Assembly that any Goundfish Rationalization Plan for the Gulf of Alaska adopted by the North Pacific Fishery Management Council contain the following elements:

- 1. An independent harvester fleet is maintained; harvester vessels are not linked to processors, and the number of processors is not limited.
- 2. State Sovereignty over activities inside three miles is recognized as a right of the State of Alaska, not subject to federal approval.
- 3. If community protection programs such as the CFQ and CPP proposals are implemented, they do not allocate access privileges or harvest rights to communities outside the local management area.

CLERK/PLANNER
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FINANCE DIRECTOR
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Resolution 05-09, Page 2

4. Entry level opportunities are maintained in GOA groundfish fisheries particularly in not yet existent markets such as rockfish.

PASSED AND APPROVED BY THE ASSEMBLY OF THE ALEUTIANS EAST BOROUGH on this 13th day of January, 2005.

IN WITNESS THERETO:

Stanley Mack, Mayor

ATTEST:

Tina Anderson, Clerk



City of Homer Port / Harbor

4350 Homer Spit Road Homer, Alaska 99603-8005 Telephone Fax E-mail Web Site (907) 235-3160 (907) 235-3152 port@ci.homer.ak.us http://port.ci.homer.ak.us

January 31, 2005

Stephanie Madsen, Chair North Pacific Fisheries Management Council 605 W. 4th Avenue, Suite 306 Anchorage, AK 99501-2252



RE: Agenda Item C-2, Gulf of Alaska Groundfish Rationalization

Dear Ms. Madsen:

The City of Homer would like to express its continued support of NPFMC efforts toward Gulf of Alaska Groundfish Rationalization. The life-safety, environmental and economic benefits of a rationalized fishery are of paramount importance to the City of Homer. However, the regionalization provision under consideration by NPFMC represents a barrier to offering the full support of the City of Homer and our local fishing industry. Regionalization of groundfish deliveries stifles competition, innovation and the ability to adapt to changing biological and economic parameters, all hallmarks of a healthy commercial fishery.

It is a suggestion of the City of Homer that NPFMC establish a committee comprised of local government representatives and fishermen from key communities in both the North and South Regions. The purpose of the committee would be to study and discuss issues related to regionalization in an effort to identify common interests. It would be the further goal of this committee to identify key biological and economic interests unique to each region that might be included in a regionalization plan.

North region participants could include City of Homer, Kenai Peninsula Borough, City of Seward, City of Cordova and North Pacific Fisheries Association. A similar group from the south region with NPFMC staff support could engage in constructive discussion and make recommendations to NPFMC regarding regionalization of deliveries that would further the goal of a rationalized Gulf of Alaska Groundfish Fishery.

Thank you for your consideration. If you have any questions, please contact me at 235-8121 or Steve Dean, Port Director, at 235-3160.

Sincerely,

Walt Wrede City Manager January 31, 2005

Alaska Jig Association PO Box 2193 Kodiak, Alaska 99615 907-486-2601

NPFMC

To Interested Parties:

N.P.F.M.C. The Alaska Jig Association has many concerns in regards to the Federal rationalization of the Gulf of Alaska. We feel that our gear group must be included in the rationalization. In 2004 there were over 500 fishermen with jig permits in the state of Alaska. This is one of the only fisheries to have new entrants.

We would like to request 10% of the total allowable catch (TAC) from federal waters for the jig gear group in the rationalization plan. There is a definite increase in number of participants that have minimal past history in the jig fishery. We have an emerging entry level fishery that has negligible history in the qualifying years. The precedent has been set in the BSAI, as the jig fleet has been allocated a percentage of the BSAI cod TAC. We feel like we've been cut out of the process, even though we we're impacted by rationalization. We have a social and economic position in this fishery, so we deserve consideration. By law we must be addressed.

We do not want to see a closed class of groundfish processors for our fixed gear group. We feel that it's unconstitutional to limit us in our marketing abilities. It is against anti-trust laws of our nation specifically the Sherman Anti-trust Act of 1890. We want to decide where, when and to whom we would like to deliver our fish now and into the future.

The following is in support of our position. Please see the enclosed attachment:

With keen observation,

Locke Finley Secretary/Treasurer At its April 2004 meeting, the Council received a report from the State of Alaska Board of Fisheries concerning the future management of Gulf of Alaska State water fisheries and coordination of that management with the management of federal water fisheries under the Gulf of Alaska comprehensive rationalization program. In response to the recommendation of the Board of Fisheries, the Council adopted the following options for allocating a portion of the TAC to the State water fisheries (inside of 3 nautical miles):

- 1. An amount equivalent to the total annual catch (for each groundfish species/group) from state waters (inside of 3 nautical miles [e.g., parallel and 25% Pacific cod fishery]) by all vessels will be managed directly by the State of Alaska Board of Fisheries as a TAC/GHL equivalent to:
 - a. Highest amount taken in state waters by area;
 - b. Highest amount taken in state waters by area plus 15%;
 - Most recent four-year average harvest from state waters.
- 2. All catch inside of 3 nautical miles by non-federally permitted vessels fishing the parallel fishery, plus all catch under the 25% state water cod fishery and the PWS Pollock fishery remains under the authority of the State of Alaska Board of Fisheries.
- 3. Only the catch associated with the 25% state water cod fishery and the PWS Pollock fishery remains under the authority of the State of Alaska Board of Fisherios.

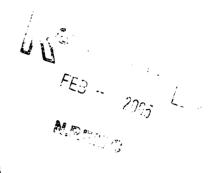
These provisions will be substituted for the existing provisions concerning allocations to the State waters fisheries in the elements and option for Gulf rationalization. Staff contact is Mark Fina.

Groundfish Forum

4241 21st Avenue West, Suite 200 Seattle, WA 98199 (206) 213-5270 Fax (206) 213-5272 www.groundfishforum.org

February 1, 2005

Ms. Stephanie Madsen, Chairman North Pacific Fishery Management Council 605 West 4th Ave. Anchorage, AK 99501 FAX: 907-271-2817



Re: Agenda Item C-2, GOA Groundfish Rationalization

Dear Madam Chair,

Groundfish Forum is a trade organization representing 19 'head-and-gut' trawl catcher processors which target non-pollock species in the Bering Sea, Aleutian Islands and Gulf of Alaska. We represent 90% of the capacity of the non-AFA trawl catcher-processor sector, We realize that the Council is only considering some portions of GOA rationalization at this meeting and may not re-visit the major components; however, we are writing you regarding component 3.4.7.2 of the program.

This component would mandate that any change in CP history ownership — whether by transfer, death, re-organization or whatever — would result in that history becoming CV history. As we have repeatedly testified, catcher-processors have a long and committed history in the Gulf of Alaska and actually pioneered many of the fisheries which have recently become viable for shoreside operations. Many catcher-processors are owned by families who have passed this history down through two or three generations. It is unconscionable to simply devalue this history, and the contribution of these families, by this component. In effect, CP history would have little to no value because everyone would know that it cannot be transferred and that within one generation it would convert to CV.

There is no need to leave this component in 'for analysis.' Staff has already indicated the result, which we have outlined above. No further information will be gained in analysis. It simply needs to be removed.

There are plenty of options in the package which allow CP history to transfer shoreside. We ask you to heed the recommendations of your Advisory Panel, which has repeatedly voted to remove this unreasonable element.

Thank you for the opportunity to comment.

T. Edward Luttrell
Executive Director

To: North Pacific Fisheries Management Council

Re: C-2 GOA Groundfish Rationalization

From: Fish Heads, an Alaskan advocacy group for working fishermen and their towns.

Q: What is the point of rationalization?

On the surface it is a way to better utilize and manage fisheries. But a peek behind the curtain reveals the true wizard. Groundfish rationalization will be what crab rationalization is now, a means for big processing companies to hijack the North Pacific Management Council to gain virtual ownership of a public resource. Forever.

By bribing a select group of fishermen, boat owners who participated in a four or five year period, a small group of processing companies will own the marketplace, and thus the profits, of a resource that has provided life for local fishermen for thousands of years.

Since every single participant in the harvest industry is a business unto himself this is nothing less than large, faceless, mostly foreign, corporations going to war against small, independent American businessmen, whose faces can be seen on every boat in the fleet.

John and Yoko were not so brazenly in bed together as the NPFMC and processing interests.

We at Fish Heads are not afraid to say that the Emperor not only has no clothes, but that he and Yoko are wrecking the Beatles.

The independent contractor culture of the fishing industry is one of the few places where the American dream is still true. Hard work, determination and responsibility are the marks of a successful skipper or deckhand. These are people who live in the communities where the resource is, people who have traditionally harvested it, people whose fathers and sons also harvest it, people for whom the resource is their lifeblood.

Under the present rules they all feed their families. The new rules are specifically designed to eliminate the small businessman by awarding the resource and the marketplace to those larger interests who sit nakedly in their Council seats, or strut confidently outside in the hallway. This cold and callous driving of so many from the industry, like refugees from Rwanda, is nothing short of shameful. The public interest should be served by those who sit in the Council seats. Serve your other masters when the meeting is over.

So now, having offended everyone, we would like to suggest the following:

- 1. Regionalization should be considered as an alternative to processor licenses, not heaped on top. Also, to be fair to other communities and provide flexibility for the marketplace, regionalization should be phased out after processors have had a reasonable period to adjust to the new realities of the marketplace.
- 2. If processor licenses are inevitable, fixed gear fishermen should not be involuntarily bound to any processor. Most of the present alternatives have arisen from co-operation between processors and harvesters using trawl gear. Fixed gear fishermen, who deliver a higher quality product, must be allowed to supply any legitimate market they choose. Local fishermen are often pot fishermen and longliners. By choosing to not block their access to the free market, the interests of both local fishing communities and a healthy free market are served.
- 3. A portion of the TAC should be set aside for the skippers and crew who will be forced out of the industry. For those skippers and crewmen who fulfilled their contractual obligation during the qualifying years, a portion of the TAC should be set aside, harvested, and proceeds distributed in a manner similar to a CDO.
- 4. Owner on board. If you buy quota, you should be there when it is harvested.
- 5. Entry Level should not be the responsibility of the State of Alaska. As the NPFMC slams all the doors of opportunity shut, it finds that it must pressure the State to do the same, because of the paradox of parallel fisheries. Unfortunately, the Constitution of the State of Alaska forbids such abuse of its citizens. As the State busily knits a patchwork of loopholes, dropthroughs, and scraps of quota together into a quilt it hopes to throw over its Constitution, perhaps we should wonder why our Uncle Sam feels no such obligation to his fisherman nephews.

Terry Haines Fish Heads PO Box 8112 Kodiak, AK 99615 yohaines@alaska.com

Public Testimony Sign-Up Sheet and

Handouts Received During the Meeting on this Agenda Item

Public Testimony Sign Up Sheet Agenda Item _ C-2 (a) GOA ratz - Communities

NAME (PLEASE PI	RINT) AFFILIATION
11 Strue Branson	Crewmen's Association
2) James \$5Ko	nberg Ouzinkie
3 & Rgy WolkoFF S	+. Ouzinkie Gra
4 Howard JORSEI	V Ouzinkie
5) Ernie Wei	ss King Cove
66 Joe Sullivan	Mund+ Mar/Kudiak
7 1 Duncon Fields - Doniel Mala	rkey GOAC3
	in lake & Peninsula Burough
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NOTE to persons providing oral or written testimony to the Council: Section 307(1)(I) of the Magnuson-Stevens Fishery Conservation and Management Act prohibits any person "to knowingly and willfully submit to a Council, the Secretary, or the Governor of a State false information (including, but not limited to, false information regarding the capacity and extent to which a United State fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishing vessels of the United States) regarding any matter that the Council, Secretary, or Governor is considering in the course of carrying out this Act.



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BOROUGH ASSEMBLY

February 4, 2005

Stephanie Madsen, Chair North Pacific Fishery Management Council 605 West 4th Ave., Suite 306 Anchorage AK 99501-2252

Dear Ms. Madsen:

Please accept the following as comments for agenda Item C-2 Gulf of Alaska Groundfish Rationalization before the North Pacific Fishery Management Council.

The Kenai Peninsula Borough continues to oppose the regionalization concept for groundfish in the Gulf of Alaska. The fixed gear method of harvesting groundfish is utilized by the majority of the small boat fleet within the Kenai Peninsula Borough. Once the race for fish is no longer necessary, our residents should be allowed to deliver to their home ports if they so desire.

Regionalization may protect southern Gulf of Alaska processors and communities, but it will have negative impacts on fishermen and processors in the northern Gulf of Alaska. It will not allow markets to adjust in the most equitable and economic fashion to the benefit of American consumers and producers.

As regionalization conceptually will protect communities, the opportunity may arise to publicly participate with other gulf communities in a dialogue over concerns about potential impacts to individual areas.

We would request that the NPFMC consider and analyze the exemption of fixed gear or a phase out of fixed gear from regionalization requirements.

Thank you for considering this request and the opportunity to comment.

Sincerely,

Gary Superman

Assembly President

C-2(a) Steve Branson Pub. Test handout 2-11-05 2pm

Crewmen's Association Box 451 Kodiak, AK. 99615

Ms. Stephanie Madsen, Chairwoman NPFMC 605 W.4th Ave. #306 Anchorage, AK. 99501-2252

Dear Madam Chair;

The following are the public comments of the Crewmen's Association on GOA Groundfish rationalization. Our association represents 367 crewmen from Kodiak, Dutch Harbor, Sand Point, Chignik, Homer, Newport and Astoria. Our members fish a wide range of species including BSAI crab and Groundfish, halibut, sablefish, Goa crab, Groundfish and salmon.

Before we suggest our proposals that will hopefully ease our transition to rationalization and keep our jobs from being eliminated or devalued, we would like to express our observations and concerns with the privatization of Alaska's public fisheries resources.

Privatization of halibut and sablefish, the Rationalization of BSAI crab, and now the proposed rationalization of GOA Groundfish have completely excluded the largest user group of fishermen; crewmen. Historically, over half of the twenty thousand plus crewmen licensed by the state have been AK residents. Many crewmen buy permit cards Exempting them from holding crew licenses, bringing the number of independent crewmen up further.

In the implementation of IFQ's in the longline fishery, the crew's investment of time, labor risk and expense was overlooked entirely. Deckhands were bypassed in the allocation of fishing rights and left with no protection from the deduction of unfair "rents" (often 50% or more) taken off the top of gross exvessel proceeds by IFQ holders. RAM tax, landing tax, fuel, bait, food and gear loss all now come off the remaining portion before being divided among skippers and crew. This effectively halves our traditional percentages. Consolidation of quota onto fewer boats has eliminated many crew positions.

BSAI Crab Rationalization will also have an adverse impact on the number of jobs and the percentages paid to crewmen. Already the Crab Boat Buyback Program has eliminated well over 140 jobs for skippers and crew, many of whom learned of their unemployment just before the 2005 Opillio season.

The privatization of GOA Groundfish will cause a further decline in jobs in both the harvestor and processor sectors of the industry. This will in turn, be detrimental to our coastal communities. Co-ops will dramatically reduce crew positions, percentages and the flow of fishing revenue into our communities. The processor linked salmon Co-op in Chignik has eliminated nearly 200 crew positions and reduced pay for the crewmen in the

Co-op fleet to 85\$ per day. This has caused extensive hardship on many of Chignik's residents.

The following is a list of proposals intended to minimallize the detrimental impact on skippers and crew involved and thus the communities in which they live.

1) Retain Status Quo

- 2) Allocate a portion of the TAC directly to skippers and crew that participated during qualifying years, based on traditional percentage of boat gross.
 - 3) Establish mandatory fair crewshares based on traditional percentages
- 4) Include in the Crab Boat Buyback Program substancial grants to skippers and crew displaced by fleet downsizing.
 - 5) Reduce by half, the down payment for federal IFQ loans to crewmen/skippers.
- 6) Prohibit Co-ops that eliminate skipper/crew positions, or; ensure skippers/crew displaced by co-ops are awarded their traditional percentage of catch proceeds.
- 7) Award grants to fishermen displaced by co-ops, that they might have the means to start in other industries.
- 8) Restrict participation in privatized fisheries to skippers and crew that engaged in the fisheries during qualifying years.
 - 9) Require 100% owner on board for privatized fisheries.
- 10) Most importantly; Maintain open access to all State water fisheries for AK state residents as per State of Alaska Constitution.

Thank you much for your consideration; the livelihoods of our fishermen and the futures of our families and communities depend on your thoughtful decision making

Steve Branson

Crewmen's Association