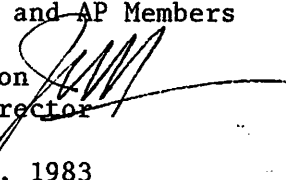


M E M O R A N D U M

TO: Council, SSC and AP Members

FROM: Jim H. Branson   
Executive Director

DATE: September 21, 1983

SUBJECT: Tanner Crab Fishery Management Plan

*ACTION REQUIRED*

*Review and final approval of Amendment #10 to the Tanner Crab FMP.*

BACKGROUND

At the July meeting, the Tanner crab PMT presented a revised Amendment #10 for Council review. This amendment focuses on the regulatory inconsistencies created by the Alaska Board of Fisheries at their spring shellfish meeting. Specifically, the amendment would establish two new exclusive registration areas (Alaska Peninsula and Southeastern) and set a 200-pot limit in the Kodiak district, down from 250 pots as proposed in Amendment #8. Following Council review, the amendment was approved for public comment at the last meeting. A copy of Amendment #10 is included in your notebooks as item D-4(a). The public comment period began on August 15 and ends at this meeting. The only comments received to date have been a letter from the Aleutians East Coastal Resource Service Area Board, supporting the amendment and a letter from Yak-Tat Kwaan, Inc. supporting the designation of Southeast as an exclusive registration area. Their letters are enclosed as item D-4(b) and (c).

It was apparent from the Council discussion in Homer that based on the information we have available serious questions exist as to whether the exclusive area designations and pot limits can be considered legal or cost-effective in terms of the Magnuson Act, the Regulatory Flexibility Act and Executive Order 12291. Do the proposed actions serve a conservation purpose? Have all the alternatives to the problems Amendment 10 addresses been adequately examined and considered? In fact, have the objectives of the amendment been adequately specified?

Specifically, the Council must show that proposed rules are based on adequate information concerning the need for them and they must assess the consequences of the proposed actions; regulatory objectives have to be chosen to maximize the net benefit to society; and the least-cost approach to achieving a given objective should be chosen.

To help the Council in this matter, the staff has prepared a detailed Regulatory Issues Paper (RIP), outlining what we see as the primary issues and economic impacts of the proposed measures. An oral summary of this document will be available. An abstract of the RIP is included in your materials as item D-4(d). In addition, the staff sent a letter to the Alaska Department of Fish and Game asking for clarification of the objectives and any additional justification for the proposed measures. A response to that letter should be available at this meeting. Letters were also sent to the National Marine Fisheries Service, U.S. Coast Guard, and the Alaska Department of Public Safety (ADPS) requesting their opinion on the enforceability of pot limits. While the NMFS and the Coast Guard state that they are in no position to enforce pot limits, given their limitations in equipment, personnel, and current fiscal situations, the ADPS feels they can assure reasonable compliance with pot limits. Their letters are included as items D-4(e), D-4(f) and D-4(g), respectively. A representative from ADPS will be available to answer any additional questions.

Amendment #9, which establishes a framework procedure for setting fishing seasons and updates MSY and ABC values was approved by the Council for Secretarial review at the July meeting. The amendment package, including the Environmental Assessment, Regulatory Impact Review and implementing regulations is nearing completion and will be sent to Washington D.C. in the next few weeks.

Amendment #8, "the housekeeping amendment," which eliminated many regulatory inconsistencies that existed between the Tanner Crab FMP, federal regulations and state regulations, was partially approved by the Secretary on August 18, 1983. The portion of the amendment which would establish Tanner crab pot limits in the Kodiak and Prince William Sound areas was disapproved because it was not consistent with National Standard 7, which requires that conservation and management measures shall, where practicable, minimize costs. It was also determined that there was a lack of adequate information justifying the proposed pot limits. A letter to the Council from NMFS explaining their action is included as item D-4(h). The approved portions of Amendment #8 will become effective on October 5, 1983.

The Northwest and Alaska Fisheries Center Summer Trawl Survey is now complete and currently undergoing analysis. A preliminary report on the status of the Bering Sea Tanner crab stocks will be available.

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL  
MANAGEMENT RECOMMENDATIONS AND CONSIDERATIONS  
FOR THE TANNER CRAB FISHERY IN THE FCZ OFF ALASKA  
PROPOSED AMENDMENT #10

I. INTRODUCTION

The Magnuson Fishery Conservation and Management Act of 1976 (MFCMA) requires that stocks of Tanner crab be managed as a unit throughout their range. The Tanner crab fishery off Alaska extends into the waters of both state and federal jurisdictions, and the management objectives and measures of both zones should, therefore, be compatible. The intent of the Fishery Management Plan (FMP) is to manage the Tanner crab resources off Alaska in a manner that is consistent with the State of Alaska's management regime and MFCMA National Standards while promoting conservation and allowing full utilization of the resource for food production.

In March 1983 the Alaska Board of Fisheries (Board) reviewed proposed fishery regulations for the 1983-84 Tanner crab fishery. These proposals were submitted by the Alaska Department of Fish and Game and the fishing industry. Following review of the proposals and public testimony, the Board took regulatory action which created inconsistencies between state and federal fishery regulations. While some inconsistencies can be eliminated through proposed FMP Amendment #9 currently undergoing public review, others remain. To remove the remaining differences the Council is considering similar proposals that will create two exclusive registration areas and change pot limits in the Kodiak area. Amendment #10 to the FMP represents the changes necessary to bring state and federal regulations into conformity.

II. REGULATORY PROPOSALS

Specific regulatory alternatives for the Tanner crab fishery have been submitted by the Tanner crab Plan Maintenance Team and individuals and are listed below. Alternatives that will bring the FMP and federal regulations into exact conformity with current state regulations are indicated by an asterisk (\*). The Council wishes to put these proposals out for public review

and discussion. Based on public testimony and any new information, the Council will review and consider final approval of the amendment at their September meeting.

A brief discussion of each proposal and its alternative is included where necessary to provide background information.

A. Registration Areas

\*1a. Create a new exclusive registration area to be named Alaska Peninsula (Area M).

Discussion: This proposal combines the non-exclusive Chignik and South Peninsula districts of Registration Area J (Westward) and establishes a new exclusive registration area (Figure 1). The new area will be named Area M - Alaska Peninsula and will consist of the two districts, Chignik and South Peninsula. Area M will have as its eastern boundary the longitude of Cape Kumlik (157°27'W. long.) and as a western boundary, a line extending south from Scotch Cap Light. The new registration area mirrors in both size and location the Alaska Peninsula area currently in use by the state for managing king crab.

If the Council adopts this proposal, they would also be designating this new area as an exclusive registration area. As with the other federal and state exclusive registration areas (Cook Inlet and Prince William Sound), vessels registering to fish Tanner crab in an exclusive area will only be allowed to fish that area and no other area. This differs from the exclusive registration areas defined in the king crab fishery where vessels are allowed to fish in one exclusive area and in any other non-exclusive registration area. The current federal and state definition of exclusive registration areas in the Tanner crab fishery are identical to the definition of super-exclusive registration areas adopted by the state for some of the Gulf of Alaska king crab fisheries. Prior to the Board's action in March 1983, the Chignik and South Peninsula districts were designated non-exclusive, meaning that vessels registered to fish these area districts could move to any other non-exclusive area following a change in vessel registration.

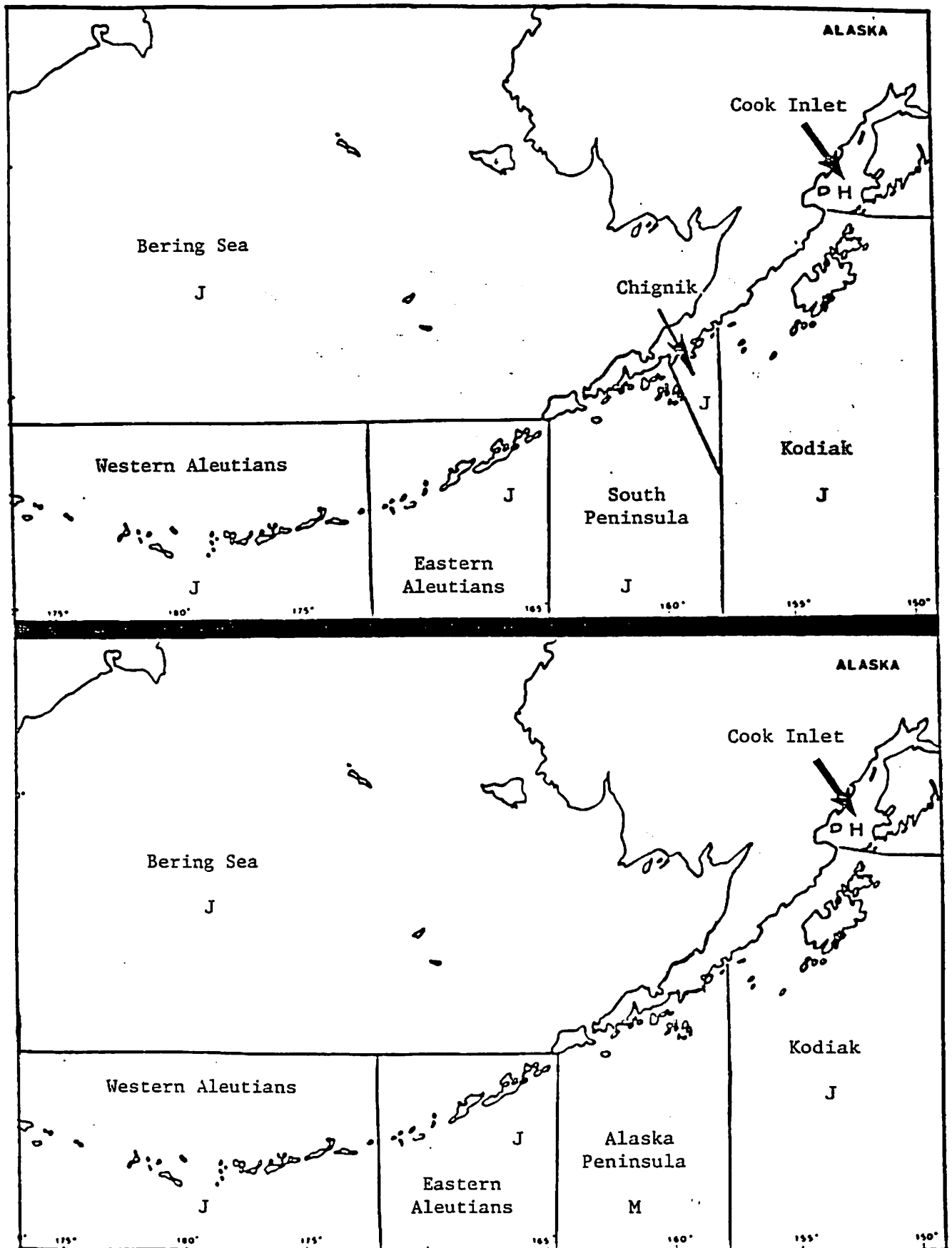


Figure. 1. Current(top) and new(below) registration areas being proposed in this amendment. The Alaska Peninsula Area would be designated as exclusive while the other areas would keep their non-exclusive status.

The Alaska Peninsula area (composed of the current Chignik and South Peninsula districts) Tanner crab resource is relatively small compared to levels of Tanner crab found to the east (Kodiak area) and the west (Bering Sea area). Fishing vessels and floating processing facilities which fish Tanner crab in the Kodiak and Bering Sea districts transit the Alaska Peninsula area. Presently, opportunity exists for this mobile processing and harvesting fleet to fish in the Alaska Peninsula area on the way to more productive fishing grounds in the Bering Sea. This situation presents two major concerns -- conservation and management of the Alaska Peninsula Tanner crab resources, and allocation of this resource among competing users.

The most significant conservation purpose served by exclusive registration areas is the reduction of opportunity for pulse type fishing effort, which tends to require overly conservative management, preventing full utilization of available segments of the total crab stocks within the registration area. The exclusive registration designation reduces the mobility of fishing vessels, particularly larger vessels which are capable of operating long distances from their home ports. Larger vessels generally have greater fishing power due to their ability to carry more fishing gear and to fish in adverse weather conditions.

It is generally thought that if the new Alaska Peninsula area is made exclusive, larger vessels will bypass the area, with its relatively smaller and less productive stocks, in favor of the opportunity to fish multiple areas elsewhere. Such a reduction in large vessels participating in the Alaska Peninsula fishery, if it occurred, should allow for a longer harvesting season and reduce the risk of the optimum yield being inadvertently exceeded. Management biologists felt such a threat existed in 1983, because the combined hold capacities of the fleet fishing the area exceeded nine million pounds, while the area's optimum yield was five million pounds. In theory, if all vessels returned with full holds, a single trip by the fleet could seriously endanger the resource.

It should be noted that with Tanner crab stocks currently at a relatively low level of abundance, catch per unit effort is low and the chances of vessels returning with full holds are low. If stock abundance improved, the likeli-

hood of this occurring would increase, but the optimum yield would also be higher. Thus, it seems unlikely that there is a serious risk of a single fleet trip bankrupting the resource. Nonetheless, the more fishing capacity on the grounds, the greater the uncertainty facing managers about when to close the season as catches approach the harvest guideline. There is currently no reporting system to inform managers of the catch by vessels still on the grounds, so the more vessels on the grounds, the greater is the chance of missing the optimum yield. It seems more likely that the optimum yield would be underharvested rather than overharvested, given the conservative philosophy employed by area management biologists, but the error could be in either direction. It is safe to conclude that any reductions in effort which the exclusive area designation produces should make it easier to attain OY.

The effect of the restriction on the deployment of fishing effort is not entirely clear. The accepted wisdom is that imposing exclusive status on an area will reduce the number of vessels fishing there, particularly the number of transient vessels. In past years, this was what occurred when exclusive areas were created. However, with current stock conditions there is some uncertainty about the net effects on fishing effort of exclusive area designation. What determines how an operator deploys his fishing effort is his expected profits, and expected profits for vessels which fish several areas depend heavily on the health of stocks in those areas. In the late seventies, particularly with the Bering Sea resource being as productive as it was, vessels which fished multiple areas chose not to fish in exclusive areas if it meant foregoing fishing in the Bering Sea. With Tanner crab stocks being now generally depressed, especially in the Bering Sea, the operator faced with the decision whether or not to fish in an exclusive area might feel that fishing in the exclusive area was the best among dismal choices. Thus, there is no guarantee that imposing an exclusive area designation will achieve the stated goal of slowing the harvest rate.

The possible economic effects of establishing the exclusive area should be noted. In general, the regulation would seem to impose additional costs on those vessels whose operations are affected by the exclusive designation, because they are prevented from attaining the most economical level and pattern of effort and catch for their operation. Vessels which find it most

economical to fish in the Peninsula area either before or after fishing in other areas will be prevented from doing so; this will reduce their profits (gross earnings less operating costs). The reduction in profits is a cost to these individuals. Offsetting this cost are gains which may accrue to local fleets if large vessels are forced to choose between fishing the Peninsula area or fishing elsewhere. If the exclusive area designation causes a reduction in fishing effort in the Peninsula area, the productivity of the crab stocks may improve, or competition for them may decrease, which could improve the profits of the remaining vessels. In a similar fashion, profits of other vessels in the areas where displaced vessels shift to could be adversely affected. In the aggregate, however, it is likely that fleet profits will decline, since the regulation imposes a restriction on the economic behavior of at least some individual vessel operators, forcing a shift to a new equilibrium of effort deployment which is less favorable than before exclusive area status was instituted. It is not possible to provide a quantitative estimate of these impacts.

It appears that most of the direct impact of exclusive area designation would be felt in the harvesting sector, where substantial redistribution of harvest shares between local and non-local vessels could occur. Exclusive registration areas have generally been proposed either to minimize the effects on local area economies of anticipated influxes of non-local boats, or to reverse the effects of influxes which have already occurred. To the extent that local boats gain from the exclusive area, incomes of both boat owners and their crews would be expected to improve. As mentioned earlier, this would likely be offset by reductions in harvesting profits elsewhere.

The processing sector would probably be largely unaffected by the imposition of exclusive registration areas, since the same harvest will occur in either case, regardless of who catches it. An exception would be the circumstance where the rate of harvest was drastically affected by the regulation. If the absence of an exclusive area resulted in a rapid acceleration in harvest capacity, and an abbreviation of the fishing season, processing facilities could be strained, and result in a shorter period of processing employment for workers without other job prospects. Processors would likely incur increased costs from handling large volumes of product in a short time. Avoidance of



these undesirable effects would be a benefit of imposing the exclusive registration area. The significance of this source of benefits from exclusive registration areas must be qualified because of uncertainties about whether the harvest rate will accelerate enough in the absence of an exclusive registration area to exceed processing capacity, and because the net effects of exclusive registration areas on the distribution of fishing effort are not entirely clear.

It should be noted that if an exclusive area does result in a redistribution of catch favorable to local boats (or prevents an unfavorable redistribution), secondary impacts on businesses in the local community could be of significance. Rural coastal communities in Alaska, particularly in western Alaska, are heavily dependent on fishing for cash income. Much of the infrastructure and support and service industries found in these communities can be traced directly to fishing. Increases in local harvesting employment and income which may result from exclusive registration areas generate secondary impacts in support and service industries which may exceed the original, or direct, impact of the increase in fishing income.

1b. Maintain status quo.

Discussion: No action would allow all vessels to continue to fish in the Chignik, South Peninsula, and any other non-exclusive registration area in the FCZ. In 1982 approximately 50% of the Chignik Tanner crab harvest and approximately 30% of the South Peninsula harvest came from the FCZ.

Conduct of the Chignik-South Peninsula Tanner crab fishery must be evaluated in relationship to other Tanner and king crab fisheries. The levels of capitalization which developed in the mid-to-late seventies in the western Alaska crab fleets were, in part, based upon three factors: (1) a large high value crab biomass available for harvest in past years; (2) the ability of new vessels to fish crab in several fishing districts; and (3) the opportunity for vessels to participate in other fisheries (e.g., bottomfishing, tendering, etc.). As more vessels entered the fisheries and as crab stocks have declined, the crab fishery is now characterized by surplus harvesting capacity. Vessels which were constructed to participate in a large boat mobile fleet which

fishes numerous areas and species are suddenly handicapped by regulations which severely restrict a mobile crab fleet. Vessel captains must now, in some instances, choose between a single area crab fishery and fishing in several areas in their attempt to maximize the vessel's advantage of mobility and fishing power. As noted earlier, exclusive registration areas may concentrate vessel effort into a few crab fisheries with high stock levels because large vessels must fish higher production areas to meet their expenses; less productive areas may, as a result, have reduced competition.

While making the Alaska Peninsula an exclusive registration area could discourage transient vessels from fishing in the region, it is doubtful that it would slow the growth of the local fleet. As Tables 1-3 show, the net growth of the local fleet during 1979-83 was 38 vessels, while the non-local fleet increased by five vessels. Thus, exclusive registration may not solve the problem of continued fleet growth.

The major difficulty in adopting this option is enforcement problems which would exist if state and federal regulations were inconsistent. Monitoring this fishery and providing any needed protection to the resource would be difficult because federal enforcement of domestic crab fisheries in the FCZ is minimal and the state enforcement effort would be restricted to state waters.

\*2a. Change the Southeastern Registration Area (Area A) from non-exclusive to exclusive.

Discussion: At their March 1983 meeting the Board of Fisheries changed the designation of the Southeastern Area from non-exclusive to an exclusive registration area. This action was taken in response to concerns over the current condition of the Tanner crab stocks in this area, in an effort to slow the entry of unpredictable amounts of crab gear to the fishery. In 1982, there were 85 vessels in the Southeast Tanner crab fishery, an increase of 55 vessels over the previous season. Of the 55 new vessels, 20 large vessels were considered transient and, following the closure of this area, moved elsewhere. With a significant increase in fishing effort and an expected harvest of 750,000 - 2 million pounds, managers were concerned that the optimum yield would be exceeded by such a large fleet, or that small, isolated

Table 1. Vessel effort and catch in the Alaska Peninsula super-exclusive Tanner Crab registration area, 1978-79 through 1983.

<u>Season</u>	<u>Total Vessels</u>	<u>Change from Previous Year (%)</u>	<u>Local Vessels</u>	<u>Non-local Vessels</u>	<u>Catch</u>
1983	130	+11%	68 (52%)	62 (48%)	6,361,168
1981-82	117	+75%	52 (44%)	65 (56%)	7,829,625
1980-81	67	-35%	36 (54%)	31 (44%)	6,947,829
1979-80	103	+18%	36 (35%)	67 (65%)	10,479,171
1978-79	87		30 (34%)	57 (66%)	11,220,513

Table 2. Vessel effort and catch in the South Peninsula District Tanner crab fishery, 1978-79 through 1983.

<u>Season</u>	<u>Total Vessels</u>	<u>Local Vessels</u>	<u>Non-local Vessels</u>	<u>Catch</u>
1983	82	55 (67%)	27 (33%)	2,863,798
1981-82	72	42 (58%)	30 (42%)	4,589,049
1980-81	43	28 (65%)	15 (35%)	3,294,106
1979-80	61	32 (52%)	29 (48%)	6,961,251
1978-79	48	25 (52%)	23 (48%)	8,684,408

Table 3. Vessel effort and catch in the Chignik District Tanner fishery, 1978-79 through 1983.

<u>Season</u>	<u>Total Vessels</u>	<u>Local Vessels</u>	<u>Non-local Vessels</u>	<u>Catch</u>
1983	48	13 (27%)	35 (73%)	3,497,370
1981-82	45	10 (22%)	35 (78%)	3,240,576
1980-81	24	8 (33%)	16 (67%)	3,653,723
1979-80	42	4 (10%)	38 (90%)	3,517,920
1978-79	39	5 (13%)	34 (87%)	2,536,105

stocks of Tanner crab would be overfished if such a large fleet concentrated in a few areas. This concern was compounded by the lack of information on harvest rates and vessel location, which led to a season closure on the fifteenth day of the fishery. A review of this fishery showed that the final harvest of 1.1 million pounds could have been larger, if the season had remained open longer and if the fleet had been distributed more evenly throughout the area. Changing this area to exclusive registration could discourage transient vessels from participating in this fishery, because it probably would not be worthwhile for them to fish solely in the Southeast area. However, the Board of Fisheries took other actions which should reduce the number of transient vessels fishing Southeast waters (see discussion of the status quo alternative, 2b, below). A reduction in fleet size, however accomplished, would reduce the intensity of this fishery, thereby allowing for a longer and more orderly season which should result in a greater yield.

2b. Maintain status quo.

Discussion: Currently the Southeastern Registration Area (Area A) is divided into two districts, Yakutat and Southeast. The historical average harvest from this area has been less than three million pounds. Only a small portion of that harvest (averaging less than 100,000 pounds from the Yakutat district) can be expected from federal waters. There has been no recorded catch of Tanner crab from federal waters in the Southeast district. Therefore, selecting the status quo alternative in the Southeastern area would have little impact on the fishing fleet and the resource.

The original proposal presented to the Alaska Board of Fisheries stated that one of the primary justifications for designating the Southeastern Registration Area (Area A) as exclusive was the concern over the increasing number of large, mobile vessels that fished this area prior to their moving to the westward Tanner crab fisheries. With such an influx of vessels, the season can be shortened considerably (as was the case in 1982-1983) with the local, smaller vessel component of the fleet remaining idle and out of work for longer periods of time. The Board, in review of this situation, took two separate actions: the first was to change the Tanner crab season opening date to coincide with the opening of the westward fisheries; the second was the

change in registration area designation from non-exclusive to exclusive. Each of these actions, together or separately, will likely reduce the number of mobile vessels from participating in this fishery since those vessels will tend to fish more productive areas in favor of fishing Southeast waters. Therefore, maintaining the non-exclusive status would have little impact on either the resource or the local communities, as long as the season opens simultaneously with the westward area.

2c. Close federal waters in the Southeastern Registration Area (Area A) in part or in its entirety to Tanner crab fishing.

Discussion: With only a small portion of the Tanner crab harvest being taken from federal waters in the Yakutat district, and with the continuing problems maintaining consistency between state and federal fishing regulations in Area A, this alternative may be desirable.

If the federal waters of the Southeast district were closed to Tanner crab fishing, there would be no adverse impacts on current participants, since there is no harvest currently from these waters.

B. Pot Limits

\*1a. Set a pot limit in the Kodiak district to 200 pots per vessel.

Discussion: In 1980 the State of Alaska implemented a 250 pot limit for the Kodiak Tanner crab fishery. (The North Pacific Council adopted a similar measure in 1982, but the measure was not approved by the Secretary of Commerce). This action was taken in response to a variety of concerns, but primarily was intended to protect small, concentrated crab stocks, and to slow the rate of harvest, thereby allowing closer monitoring of the exploitation rate, and reducing gear saturation and crowding problems on the grounds.

Recently, with Kodiak Tanner crab stocks supporting an increasing harvest, the number of new vessels entering this fishery has grown. Since 1980 the fishing fleet has grown from 188 to 360 vessels. In a single season, from 1981/82 to 1982/83, the growth in number of vessels fishing in Kodiak was 139, from 221

to 360. With gear saturation on the fishing grounds being an acute problem in the Kodiak district, pot limits restrict the number of pots brought into the fishery by new entrants and stabilizes the amount of gear used by traditional participants. Following the successful 1983 Tanner crab harvest (which exceeded 18.9 million pounds) and with the stocks in a healthy condition, especially when compared to other Tanner crab fisheries, it is likely that the Kodiak fishery will experience continued growth.

Based on the distribution of number of pots fished by vessels in this fishery, it has been estimated that the growth in effort (number of pots fished) from 1981/82 to 1982/83 was about 64% with the existing 250-pot limit, and would have been about 54% with a 200-pot limit, assuming that the lower pot limit didn't deter any vessels from fishing Kodiak waters. Roughly 21% of the fleet would be affected by the pot limit, since they fish between 200 and 250 pots. Presumably these vessels would be forced to fish in a less efficient manner with a lower number of pots, thus increasing their costs of production. Some effort may be redistributed elsewhere, as other areas with higher (or no) pot limits become relatively more profitable.

The Kodiak fishing community has expressed their desire for a lower pot limit, and in 1983 the State of Alaska lowered the pot limit from 250 to 200 pots. While it is questionable whether a 50 pot reduction will reduce the gear saturation problem, an advantage of this alternative would be the conformity between state and federal fishing regulations.

1b. Maintain status quo.

Discussion: With this alternative, a regulatory inconsistency will exist. This would undermine the State of Alaska's efforts to enforce its pot limits. However, there are serious concerns about whether pot limits can be enforced at all, given the extent of patrolling that would be required and the current fiscal climate.

While most of the fleet uses fewer than 200 pots (due to individual economics, vessel sizes, desired soak time, etc.), approximately 21% of the fleet does use more than 200 pots. Fishermen who fish with more than 200 pots have chosen to do so because they have determined it is the most efficient use of their time and vessels. Adoption of this alternative would allow this segment of the fleet to continue to fish in the FCZ with more than 200 pots, avoiding the imposition of increased costs on them.





# YAK-TAT KWAAN, INC.

PHONE 907-784-3335

P.O. BOX 416

LOCATION	ROUTE TO	INITIAL
	Exec. Dir.	J
YAKUTAT, ALASKA 99689	Deputy Dir.	
	Asst. Dir.	
	Exec. Sec.	
	Asst. 1	
	Asst. 2	
	Asst. 3	
	Asst. 4	
	Asst. 5	
	Asst. 6	
	Asst. 7	
	Asst. 8	
	Asst. 9	
	Asst. 10	

September 21, 1983

Mr. Jim Branson, Executive Director  
NORTH PACIFIC FISHING MANAGEMENT COUNCIL  
605 West 4th Avenue  
Anchorage, AK 99510

SENT: FEDERAL EXPRESS

Dear Mr. Branson:

I have reviewed your letter to the public, of August 11, 1983 on possible amendments to the Fishery Management Plan for the commercial tanner crab fishery, off the coast of Alaska, by which the North Pacific Fishery Management Council hopes to eliminate differences between federal and State regulations.

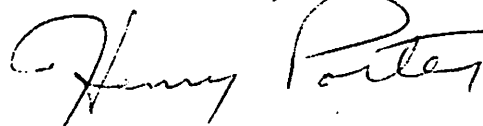
Of the three possible scenarios being considered, for Southeast Alaska (area A), our organization favors changing from a non-exclusive registration area to an exclusive registration area, and leaving the federal waters open to tanner crab fishing. This scenario was the one adopted by the Alaska Board of Fisheries, at their March 1983 meeting.

Tanner crab fishing, in the Yakutat area, not only provides income for fishermen, it also provides income for our local residents working in the plant, processing tanner crab.

We believe that an exclusive registration area, for Southeast Alaska, would give both federal and State Management Officials, a good edge on managing the tanner crab fishing and protect the stocks from being over fished.

Sincerely,

YAK-TAT KWAAN, INC



Henry Porter  
President

HP/sb

# United Fishermen's Marketing Association, Inc.

P.O. Box 1035 Kodiak, Alaska 99615

Telephone 486-3453



August 6, 1983

Mr. Robert McVey  
Director, Alaska Region  
National Marine Fisheries Service  
P.O. Box 1668  
Juneau, Alaska 99802

Dear Bob:

During the Council discussion on Thursday, July 28, regarding the Tanner Crab Fishery Management Plan, you stated that you planned to disapprove that portion of Amendment #8 to the Tanner Crab FMP which proposes to adopt the State regulation in effect since 1980 which limits the number of pots used for fishing tanner crab to 250 in the Kodiak District. You further stated that your disapproval is due to your review which you feel demonstrates that this pot limit is unenforceable and, therefore, not consistent with National Standard #7 which requires that: "Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication". I must strongly disagree with your proposed decision to disapprove the 250 pot limit for the Kodiak District. It is, in my view, the wrong decision and will certainly have negative consequences for the tanner crab resource and the industry which depends on this resource.

There are a multitude of issues at stake regarding this pot limit, not the least of which is the protection of the tanner crab resource which is in a dangerous situation, as both Alaska Department of Fish & Game (ADF&G) and your own N.M.F.S. surveys have demonstrated for the past number of years. The success of the tanner crab resource is, of course, important to those of us in the industry concerned with it. The Alaska Board of Fisheries (ABOF) adopted this regulation in 1980 and the North Pacific Fishery Management Council (Council) after much opportunity for public comment and scrutiny, adopted the 250 pot limit as part of Amendment #8 to the Tanner Crab FMP at the Council meeting held in September, 1982.

Mr. Robert McVey  
August 6, 1983  
page 2

I respectfully submit that your proposed decision is based on an inadequate understanding of the resource and economic issues at stake. I have a strong respect for the National Standards, but the use of National Standard #7 as a defense for disapproval of this part of amendment #8 is disappointingly demonstrative of the non-productive practice of using a marginal technical argument with almost no relation to the resource conservation issue at hand to disapprove a proposed regulation. National Standard #7, particularly, could probably be used to disapprove every fishery regulation ever proposed. It has been my feeling for some time that NMFS has not made the effort to totally understand the total circumstances surrounding this pot limit, and has always treated this issue in an arbitrary and cursory fashion, with a pre-disposed attitude in judgement of the issue. I urge you to carefully consider your proposed decision.

1. Enforcement Issue: You stated that the pot limit is not possible to enforce and that the only enforcement action regarding pot limits was an instance involving a dungeness crab pot limit. If my recollection is correct, you further stated that the increased cost of enforcement would not result in increased benefits to the industry. Please remember that the fishing industry has been operating with a State regulation limiting the number of tanner crab pots in the Kodiak District since 1980. You agreed that NMFS would not increase their enforcement effort over the current level being provided to the fishing industry. I agree that due to budgetary and manpower restraints currently in effect, the prospects of additional resources being provided by NMFS for enforcement purposes is highly unlikely. This does not mean, however, that NMFS should not promulgate additional regulations which are worthy. It has been my observation that NMFS, in the past many years, has not been able to mount an enforcement effort necessary to require adherence to the many regulations already in effect regarding the Tanner Crab FMP. One need only look at the many regulations which NMFS enforcement personnel are required to enforce regarding the FMP's now in place, and the additional Federal laws under which NMFS has been given enforcement responsibility, to see clearly that existing NMFS manpower status cannot possibly attend efficiently to the responsibility with which it has been charged. NMFS and U.S. Coast Guard effort has been commendable, however, and I do not wish to infer a lack of desire or attitude. The problem is a lack of resources. It has been my observation that the vast amount of enforcement effort has been directed towards the foreign fisheries, where we know that there are gross violations of Federal regulations; and domestic fleet enforcement has

Mr. Robert McVey  
August 6, 1983  
page 3

not received great attention thus far due to the greater demands of attempting to apprehend foreign violators and the high level of enforcement by the State of Alaska. We have not, however, attempted to discontinue recommending and promulgating further Federal regulations where the need exists. The State of Alaska recognized the need for this regulation, and has been enforcing the 250 pot limit since 1980. They have developed, and are developing ways, means and methods to insure adherence to this regulation. State enforcement agencies have similar manpower and budgetary concerns as N.M.F.S. The State of Alaska also continues to promulgate regulations where the need exists. Given that the State has been enforcing the 250 pot limit since 1980, and that both the State and N.M.F.S., as a matter of practice, cooperatively enforce those regulations which are common to both authorities (i.e., Tanner Crab FMP regulations), it seems that additional effort on behalf of N.M.F.S. to enforce the 250 pot limit is an academic problem which already exists in the existing regulatory structure. The State of Alaska, as a matter of practice, enforces regulations which are consistent with those of the Federal government and which regulate fishing in the FCZ by vessels registered under the laws of the State.

Regardless of the enforcement capability of either the Federal or State agencies, the 250 pot limit, as well as other regulations tailored to address resource problems, has, in fact, successfully acted as a deterrent to act otherwise.

The evaluation of proposed regulations based only on enforceability criteria is not acceptable in treating serious resource conservation and management challenges. There exist many Federal fishing regulations which are impossible to enforce.

2. Reasons for promulgation of 250 pot limit in Kodiak District. As previously discussed, the State originally promulgated the 250 pot limit in the Kodiak District in 1980. This regulation was proposed after many years of discussion relative to an evaluation of alternatives available to meet the projected and expected decline in stocks of tanner crab. There was wide industry consensus among the users of this resource that the 250 pot limit was necessary, acceptable, and provided a more than reasonable opportunity for all segments of the fleet to participate successfully, competitively, and efficiently in the fishery. The 250 pot limit was seen (and has been demonstrated) to not increase costs to the industry, and is a point at which economic efficiency is close

Mr. Robert McVey  
August 6, 1983  
page 4

to its optimum. Federal and State stock assessments surveys, as well as actual fishery performance and data gained from it, demonstrated that the overall trend in Alaska pointed toward the decline of tanner crab stocks. Population levels of the tanner crab stock in Alaska have worsened since the time of the original decision in 1980 to promulgate the 250 pot limit. The industry was worried then, and continues to worry now. There are biological limits to the tanner crab resource. The massive increase in vessels and gear which entered the crab fisheries in Alaska in the past 10 years is a well-known fact. In Kodiak alone, since 1980 the number of vessels delivering tanner crab has increased from 188 to 360. These additional vessels obviously bring more gear to the area. The need for maintenance of a pot limit in the Kodiak area is greater now than it was in 1980. There can be no argument that the Tanner Crab Fishery is characterized by surplus harvesting capacity at this time, has been for the past 3 years, and will continue to be so. The industry and the Board felt there must be an effort-level restriction or control. With the great influx of vessels into the crab fisheries, and the associated increase in gear which these vessels bring with them, there developed and continues to exist, problems with dangerously high rates of harvest on certain stocks and stock-segments, and ability to properly monitor the exploitation rate. Full and efficient utilization of the OY became, and still is, impossible to achieve. The 250 pot limit was an effort to slow the rate of harvest, better monitor the exploitation rate, and therefore, provide a greater opportunity to achieve full and efficient utilization of the OY. The 250 pot limit was the best attempt made, in the face of higher numbers of vessels and gear, to provide a more orderly season, better monitoring, and greater yield from the tanner crab resource.

Prior to 1980 there were, and continue to be, problems with grounds pre-emption and gear saturation. There were many areas in the Kodiak District, and throughout Alaska, where vessel-operators placed large amounts of gear on the grounds in an effort to pre-empt other vessels from placing gear in these areas. This resulted in inefficient utilization of the resource and, in many cases, damage to the resource. This damage was and still is represented by mortality inflicted upon crab who enter these pots. These pots may go unattended for long periods of time, during which time they accumulate (as they are intended to) tanner crab, and, in many cases, king crab. Remember that not only legal tanner and king crab are accumulated, but sub-legal and female as well. Tanner crab in pots are susceptible to high rates of mortality over short periods of time, more so than king crab.

Mr. Robert McVey  
August 6, 1983  
page 5

Short of absolute mortality, tanner crab product-recovery and product-quality suffer after being held in pots for relatively short periods of time. Tanner crab are very susceptible to stress (affecting mortality) in pots, and are frequently known to throw (shed) their legs in pots, in crab boat holding tanks, processor holding tanks, and during processing operations. Tanner crab which are held in untended pots, and which are victims of mortality and/or stress, do not enhance full utilization of the resource. In causing damage to sub-legal and female tanner crab, in addition to legal tanner crab, full utilization of the resource from the perspective of both ABC/OY and MSY are negatively affected; both from the resource mortality standpoint and the standpoint that these crab are not available to other operators. This problem is exacerbated when you consider the fact that even when discussing gear which is efficiently fished, a major factor such as weather in Alaska during the time when tanner crab are available (winter), prevents, in many cases, efficient utilization of gear even with the most efficient operations. Lost gear due to weather, currents, poorly maintained gear, tangled gear (due to crowding, weather, and high numbers of pots), etc., is another problem which is magnified greatly (and proportionally) by unrestricted amounts of gear on the grounds. Lost gear is a problem in the crab fishery, and is an even greater problem in cases where gear is not tended regularly.

In times of low stock abundance which we face now and in the future, effort will obviously be placed on small concentrated stocks and sub-stocks. When a vessel operator sees "sign" of crab in his prospecting operations, he will naturally "dump" as much gear in that area as possible in an effort to harvest the greatest number of legal males possible, especially given the low CPUE which vessel operators have tended to operate with these past years, and his less-than-good prospects in other areas. Handling mortality on these small concentrated stocks where sub-legal males and females are concerned is obviously detrimental to the resource and the MSY concept. Unrestricted numbers of pots tend to increase the negative biological impact on the small concentrated stocks which exist in the fishery these days, and result in long-term negative impacts which affect the success of the industry which depends on this resource.

The size of the Kodiak shelf and that part of the shelf where tanner crab are available is a factor which magnifies the prospects of resource damage and economic dislocation in a

management regime which has no pot limit. In the scenario of an unrestricted pot limit, larger areas of the shelf will be prospected and fished with gear, even areas of low and no productivity, thereby inflicting pressure on stocks of tanner crab, king crab, halibut, and other species, some of these very marginal in strength.

3. Some consequences of disapproval of Kodiak District 250 pot limit and allowance of unrestricted numbers of pots.

One of the central objectives of the Tanner Crab FMP will be ignored, that of protecting the tanner crab resource from biological harm. Without a pot limit, it is certain that the biological limits of the tanner crab resource will be exceeded. There will additionally be negative impact on stocks of other species susceptible to pot fishing (i.e., king crab, halibut). The coverage of the shelf by prospecting and marginal fishing operations will broaden in area and density, inflicting greater resource damage and exacerbating gear saturation problems in areas of any potential. Fishing, therefore, will be encouraged in areas of marginal habitat, marginal size stocks, and higher incidence of other species, increasing the certainty of over-exploitation.

If over-capitalization is seen as a problem, then over-capitalization will be further encouraged. Pots are a large part of the capitalization of a fishing operation. The economic and resource related negative aspects of over-capitalization will be magnified by the allowance of unrestricted numbers of pots which encourage the use and injection of greater capital into the fishery.

The debacle of the king crab resource in the Bering Sea will be repeated in the Kodiak District regarding tanner crab. Massive amounts of unrestricted numbers of pots, many of which were never picked, infrequently picked, lost, misplaced, left to accumulate legal and sub-legal males and females (and preempt other crabbing, trawling and longlining effort), greatly contributed to the decline in the abundance of the king crab resource, thus resulting in much of the economic dislocation we face today throughout the fishery, the inefficient use of that resource, the lessened economic benefits derived from such, and the management dilemma which we presently encounter.

Unrestricted numbers of pots will result in exceeding the OY limit, over-exploitation of discreet stocks which will further

Mr. Robert McVey  
August 6, 1983  
page 7

result in the failure to maximize reproductive potential, and conservative management measures which will prevent optimum utilization of available stocks and sub-stocks in the Kodiak District.

Unrestricted gear will not result in greater resource utilization, but will result in demonstrated resource problems affecting harvest production and resultant negative impacts on processing and fishing businesses, employment and capital accumulation.

Economic efficiency of industry (harvesting and processing sectors) will decline. Unrestricted numbers of gear is inefficient for any size vessel in that the majority of efficient large vessels cannot maximize efficiency with more than 250 pots, especially given present status of stock strength. All size vessels will certainly not benefit from an efficiency standpoint from management measures which must be taken due to conservative management philosophy based upon inability to judge harvest rates, desire to protect reproductive potential, and reaction to lower CPUE rates which will especially result when larger numbers of pots are used in times of low resource abundance. (CPUE has itself been judged as a measure of efficiency). All size vessels will not benefit from either over-harvest or under-harvest, either which may occur, and negatively affect full utilization, OY, ABC, and MSY values. Industry will certainly not benefit from an efficiency standpoint when product quality and recovery rates decrease, and "dead loss" increases, due to stress-related circumstances. Industry will not benefit from shorter seasons which target effort on areas thought to have acceptable potential leaving other areas unharvested and un-evaluated.

4. Summary - As mentioned earlier, the Alaska Board of Fisheries promulgated the 250 pot limit in the Kodiak District in 1980. The fishery has been conducted since then with this regulation in effect. No major change will result in the regulatory and management regime or the actual operation of the fishery if you approve the 250 pot limit for the Kodiak District. The 250 pot limit for the Kodiak District is presently a regulation of the State of Alaska which governs fishing. The North Pacific Fishery Management Council, in September of 1982, recommended that this pot limit be adopted by the Secretary of Commerce as part of the management regime which implements the Tanner Crab FMP. The vast majority of the fleet uses less than 200 pots. Only "approximately 20% of the fleet do use more than 200 pots" (from Tanner Crab PMT report on Amendment #10, prepared during their June 22-23, 1983 PMT meeting). This would



Mr. Robert McVey  
August 6, 1983  
page 8

Mean then (and actual practice supports this) that very little of the fleet use as many as 250 pots. They are, in actuality, prohibited from using more than 250 pots at this time. Why, then, do you propose to change this? Some very good seasons have been "put in" by vessels using this 250 pot limit. There has been no major outcry against it by those who have actively participated in the fishery and understand it. Have you determined that the use of an unrestricted number of pots will maximize the net benefit to the industry? If so, where is the justification? In actuality, the disapproval of the 250 pots limit will result in a net cost to the industry. Has a level of impact analysis associated with your proposed decision to disapprove the 250 pot limit been prepared? The disapproval of the 250 pot limit will result in a significant and negative economic impact on a substantial number of businesses. Has an assessment been performed which weighs biological data, conditions, and actual fishing operational practices which justifies disapproval of this 250 pot limit? What other alternatives have been explored, considered, and presented to answer the dilemma which we have and still face in the crab fishery? It seems that the State is the only entity attempting to find solutions which are reasonable. There are very few other, if any alternatives available. The Council and the State of Alaska recognized this. What problems are presented by approval of the 250 pot limit? It does not limit competition. It does not re-allocate or attempt to re-allocate the resource. A disapproval of the 250 pot limit may have the result of re-allocating the resource, and undermine management strategy. Even during periods of high resource abundance, 250 pots are adequate and result in economic efficiency of fishermen, processors and marketers.

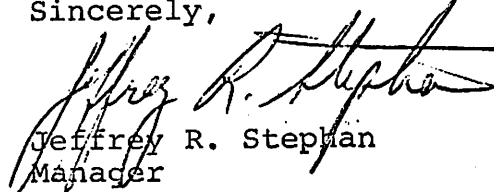
In the past, the Federal regulatory structure has not demonstrated its ability to respond to the resource and industry needs of the tanner crab fishery. In practice and philosophy, the Council has recognized this and attempted to manage the fishery in cooperation and concert with the State of Alaska and the National Standards. The expressed intent of the Tanner Crab FMP is to manage the resource in a manner which is consistent with the State of Alaska's management regime and MFCMA National Standards, while at the same time promoting conservation, avoiding over-exploitation, and promoting full utilization of the resource for food production and economic return. The goal of the Tanner Crab FMP, with which we have operated, is that of improving the sensitivity and responsiveness of the FMP to changes in the fishery; and to remove the causes of the prolonged and costly delays and regulatory inconsistencies between the management regimes of the State of Alaska and the Federal Government which have characterized this FMP since its inception.

Mr. Robert McVey  
August 6, 1983  
page 9

We respectfully request that you reconsider your proposed decision to disapprove the 250 pot limit for the tanner crab fishery in the Kodiak District which is contained in Amendment #8 to the Tanner Crab FMP. We ask that you consider the arguments contained in this letter and approve that portion of Amendment #8 which institutes the 250 pot limit for tanner crab in the Kodiak District.

Thank you.

Sincerely,



Jeffrey R. Stephan  
Manager

JRS/ak

REGULATORY ISSUES PAPER FOR AMENDMENT #10 TO THE  
FISHERY MANAGEMENT PLAN FOR THE COMMERCIAL TANNER CRAB  
FISHERY OFF THE COAST OF ALASKA

North Pacific Fishery Management Council  
September 1983

ABSTRACT

In response to the requirements in the Magnuson Fishery Conservation and Management Act, the Regulatory Flexibility Act and Executive Order 12291, a detailed economic analysis has been prepared for Amendment #10. The report provides the primary issues surrounding the proposed pot limit and exclusive registration areas and discusses the economic effects of all the alternatives. It is apparent that several outstanding questions must be addressed by the Council when considering the adoption of Amendment #10. Some of them are:

- (1) What are the problems in the Kodiak, Alaska Peninsula and Southeastern areas?
- (2) Will pot limits or exclusive registration areas solve the problems or provide relief?
- (3) What are the objectives of the proposed regulations?
- (4) Do they have a conservation basis?
- (5) Will they have the desired effect in terms of reallocating harvest and affecting the rate of harvest and season length?
- (6) Are those effects significant?
- (7) Given that a primary outcome will likely be redistribution of harvest, are there any net benefits or is it just a transfer among segments of the fleet?
- (8) Are there other, less costly, alternatives?

A few major points can be summarized from the pot limit discussion, tables, and analysis:

- (1) It is not apparent that instituting a pot limit will cause a significant redistribution of harvest shares among vessels, since the reduction in number of pots fished by some vessels would be partially offset by an increased harvest rate achieved by more intensive fishing of the fewer pots which they do fish.
- (2) It is not apparent that the season length will increase significantly, or that harvest rate will slow appreciably, if a 200-pot limit is instituted as compared to a 250-pot limit.
- (3) It is not even certain which way the allocation of benefits will go. There is some evidence that in Kodiak, at least for 1982/83, catch per pot declined with increasing soak time, and that the average length of soak was greater than the threshold where catch per pot

begins to decline with increased soak time. There may also be some technical reasons why vessels cannot and do not quickly reduce their average soak time. Therefore, a policy of limiting pots which forced vessels to change their fishing strategy, and caused them to fish fewer pots more frequently, could have the short-run effect of increasing the harvest share of larger vessels, increasing the harvest rate, and decreasing the season length.

- (4) It is not clear that there is a conservation purpose to the amendment. Pot limits do not appear to protect small, local stocks, and in the Kodiak area other management measures are employed to do that. Had the 200-pot limit been in place in 1982/83, it is estimated that the season would have at most been extended by less than a day, and could have actually decreased. Thus, it is not clear that the season would be significantly extended, or the harvest rate significantly slowed, to permit an argument that a conservation purpose was satisfied. Similarly, it is not clear that there would be significant reductions in gear crowding or gear loss.

Based on the information provided in the exclusive registration area discussion, a few comments can be made:

- (1) It was stated at the 1983 Alaska Board of Fisheries meeting that the objective of designating Alaska Peninsula as an exclusive registration area was to reduce the fishing pressure and handling stress on these crab stocks, and to lengthen the season as an aid to management. While exclusive registration will likely reduce the number of large, non-local vessels from fishing Alaska Peninsula, the problem (if one actually exists) stems from the rate of growth in the local fleet, a group of vessels that will be unaffected by the exclusive registration designation. Any relief provided by the regulation in the near-term will be lost if the current growth rate continues with the local fleet. Such short-lived relief would be at the expense of the non-local vessels and does not meet the stated objective in the long run.
- (2) As mentioned in the analysis, the apparent problem in Southeastern Alaska, an unexpected influx of new vessels entering the fishery, was solved twice by the Board of Fisheries at their 1983 meeting. In December 1982, 55 new vessels participated in the fishery, which led to ultraconservative management and an eventual underharvest of the available resource. The apparent intended result of the original proposal was that, by designating Southeastern as an exclusive registration area, the 20 large, mobile vessels that participated in the 1982 fishery would likely choose to fish elsewhere in the future. This would leave the resource to the local fleet, thereby slowing the rate of harvest and extending the season. However, as with the Alaska Peninsula, there has been a significant increase in the local fleet and this trend is expected to continue. Changing the area to exclusive will do nothing to slow this growth; in fact the opposite effect could occur. In addition, the Board changed the opening date of the Southeastern season to coincide with the more productive, westward areas. With that action, the large, mobile fleet is likely to bypass Southeast Alaska for one of the westward areas. Therefore, designating the Southeastern area as exclusive has no apparent benefit.



DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

AGENDA D-4(f)  
SEPTEMBER 1983

Addr  
COMMANDER (oil)  
Seventeenth Coast-Guard District  
P.O. Box 3-5000  
Juneau, Alaska 99802  
(907) 586-7363

16214

SEP 14 1983

Mr. Jim H. Branson  
Executive Director  
North Pacific Fishery Management Council  
P.O. Box 103136  
Anchorage, AK 99510

Dear Mr. *Jim* Branson:

I have studied the practical aspects of enforcing a pot limit in the tanner crab fishery as requested in your letter of 12 August 1983. In summary, the cost to effectively enforce a pot limit would be disproportional to the benefits to be achieved.

The problems that I foresee with enforcing a pot limit are many. For example:

1. The only way to determine ownership of a pot would be to pull it. The presently issued Alaska Department of Fish and Game buoy stickers frequently fall off. Each pot generally has two or more buoys attached; although these buoys are identified with an ADF&G number, the common practice of leasing gear renders accurate ownership identification by this means on the surface nearly impossible.

2. There are no Coast Guard cutters equipped to pull pots and Coast Guard personnel are not proficient in the crab fishery. Even if our cutters were equipped to pull pots, damage, with resulting government liability, is likely to occur. An alternative, to having Coast Guard cutters and personnel pull pots, would be to lease or charter suitable vessels. I would estimate 120 vessel days would be required at a cost of approximately \$3,000 per day or \$360,000 annually. This cost (not including personnel costs) approximates the annual operating cost of a 180 foot Coast Guard buoy tender.

3. Even with the proper equipment and trained personnel, the practicality of pulling every buoy line to ascertain ownership is clearly cost prohibitive.

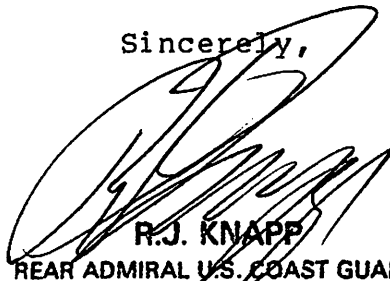
4. Air surveillance, although an asset in locating large concentrations of buoys, is not a practical enforcement tool because of the inability to identify ownership markings on the buoys.

It appears to me that there are alternative solutions to achieve the management objectives. One that might be considered is shorter seasons. This is an enforceable alternative. More cost-effective air and surface surveillance patrols could be used to tell whether the gear was off the grounds. Another alternative would be smaller pots. And still another would be limiting the number of vessels participating in the fishery or exclusive area registration. Please note that our records do not indicate any conflicts between pot vessels, only between users of different types of gear.

All factors considered, I feel that enforcing a pot limit, would not be practical; the additional resources that would be required are inconsistent with budgetary constraints. Further, any regulation which cannot be enforced is meaningless and encourages further disregard of applicable laws and regulations.

As always, I appreciate the opportunity to comment on proposed regulations. Please advise if I may be able to provide additional information.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read 'R.J. Knapp', is written over the typed name and title.

**R.J. KNAPP**  
REAR ADMIRAL U.S. COAST GUARD  
COMMANDER, SEVENTEENTH COAST GUARD DISTRICT



someone else's ADF&G or vessel registration number to frustrate enforcement efforts.

NMFS does not have vessels appropriately equipped to use in pot limit enforcement. We estimate that a minimal NMFS pot limit enforcement effort would require leasing or chartering two commercial crab vessels capable of pulling and handling a large number of pots. Such vessels would cost approximately \$3,000 per day and would probably require 90 to 120 days of vessel time per season. Charter or leasing costs alone would run \$360,000 per year, which is about one-third of our annual enforcement budget.

We would recommend the Council consider other regulatory measures to achieve the management objectives which have been stated for pot limits. We are convinced the Office of Management and Budget (OMB) would never approve a regulation implementing pot limits. The current administration insists that the need for any regulation be clearly demonstrated before its implementation. The fact that the average number of pots fished by vessels in the Kodiak area is substantially less than the proposed limit, that management objectives would not be met, and that our inability to enforce pot limits without an expenditure of funds disproportionate to the benefits would be sufficient reasons for OMB's disapproval.

Sincerely,

  
for Robert W. McVey  
Director, Alaska Region





they actually have not lost any. These things do happen, but with up-dated lists of sticker numbers, these problems are not insurmountable.

There are other systems that would be better from our point of view and we would be glad to participate in discussions of better systems, if the Secretary of Commerce decides to join the State in imposing pot limits in certain areas.

4. Can all gear without stickers on the buoys be confiscated?

Yes; if stickers are required by regulations, gear without stickers can be confiscated.

5. Is it possible to make enough random checks of buoys to ensure reasonable compliance?

There are too many variables in this question to allow a definite answer. For example, if there were a pot limit everywhere at once during the tanner season, it would be infeasible to check everywhere. If, however, the limit is only applying to the Kodiak area during tanner season, yes it is possible. It has also been our experience that when we are out on the grounds checking, other fishermen will help enforce the limit by furnishing information on the location of gear we should check.

The key to the answer to this (and #6) is your term "reasonable compliance". There is a vast difference between reasonable compliance and absolute compliance. If our goal is reasonable compliance, then pot limits are workable. A goal of absolute compliance is unattainable in almost any regulation made.

6. Is there a way to enforce the pot limit? If so, is F.W.P. in a position to do so?

My answer is yes, with the understanding that we are talking of reasonable compliance as discussed above. I believe F.W.P. is in a position to do so at the present time, given present limited applications of pot limits, given present budget with no future constraints given the authority to enforce in the F.C.Z., and if there is not a conflict between federal and state regulations.

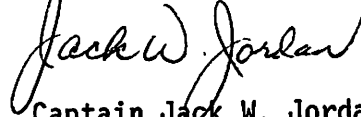
Jim H. Branson

3

September 9, 1983

If you would like to have one of us there at the meeting on September 28 or 29 to answer questions from the Council, please let me know a little in advance so I can schedule someone to be there.

Sincerely,



Captain Jack W. Jordan  
Commander, Coastal Region

JWJ/rt

cc: Colonel Henderson



(Yakutat and Southeast Districts), for which regulations were never implemented, are removed.

- B. A regulation that allowed storing crab pots on the fishing grounds for 72 hours before the start of a season is rescinded.
- C. A size limit for Chionoecetes opilio Tanner crab of 3.1 inches (78 mm) is established.
- D. The use of side-loading pots in the Yakutat District of Registration Area A is prohibited.
- E. Fishing seasons in four districts of Registration Area J and one district of Registration Area A are revised.

The Council's amendment had also included the establishment of vessel pot limits in the Kodiak District of Registration Area J and two areas of Registration Area E (Prince William Sound). I have disapproved the establishment of these limits. My decision is based on recognition that enforcement of vessel pot limits is not practicable without expenditure of considerable fiscal resources. This management measure is, therefore, not consistent with National Standard 7, which requires that conservation and management measures shall, when practicable, minimize costs. I recognize that pot limits are intended as a conservation tool to control effort and thus better monitor the fishery. To assure compliance with vessel pot limits by the fishermen, however, would require some type of sampling system to ascertain the total number of pots being fished from a given vessel.

The Kodiak fleet is traditionally composed of about 160 vessels. Vessels from other areas number about 500. Although the actual total number of vessels that fished the Kodiak District in the 1983 season was about 400, over 600 vessels could be available to fish there. The known average number of pots to be fished is about 130 per vessel, as evinced in the Council's regulatory impact review prepared for the amendment, although the vessel pot limit adopted by the Council for this district is 250. The possible number of pots in the Kodiak District, then, could vary from 52,000 to 150,000 and these could be dispersed widely across thousands of square miles of fishing grounds. Enforcement would require on-site accountability of the number of pots being fished from a representative number of vessels, which would require considerable effort by patrol vessels that are not available.

Approximately 30 vessels fish in Registration Area E (Prince William Sound). The vessel pot limit in this area is 175 pots, except in part of the northern district of Registration Area E where the vessel pot limit is 100. Hence, totals of 3,000 and 5,250 pots could be fished. Enforcement of the number of pots being fished from a representative number of vessels is more feasible than the enforcement in the Kodiak District but is still not considered desirable in view of costs that would be incurred.

In making my decision to disapprove the above vessel pot limits, I also considered the general requirements of Executive Order 12291. General

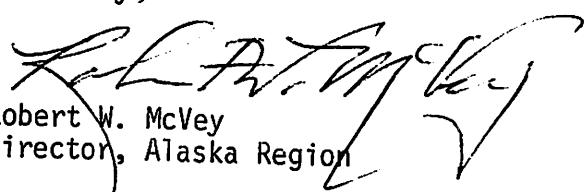
Requirement 2a stipulates that, in promulgating new regulations, administrative decisions shall be based on adequate information concerning the need for a proposed government action. Adequate information to justify the need for this regulation has not been presented to me. I believe that fishermen would likely use the number of pots optimal for the grounds they are fishing.

Under Section 304(b)(3) of the Magnuson Act the Council may submit a revised amendment, accompanied by appropriately revised proposed regulations to the Secretary. After receipt of such a revision, I, according to my delegated authority, shall immediately commence a review according to procedures required under this section.

Should the Council decide to resubmit a revised amendment to establish vessel pot limits, I recommend a revised regulatory impact review be submitted to fully justify the need for these limits and an explanation as to how they would accomplish their intended conservation objective.

I am willing to discuss my decision and my recommendation before the Council at its September 1983 meeting.

Sincerely,



Robert W. McVey  
Director, Alaska Region

3

REPORT TO

THE NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL

ON

WESTWARD KING CRAB

AND

WESTWARD REGION TANNER CRAB

BY

MARTIN F. EATON

SEPTEMBER 1983

ANCHORAGE, ALASKA

## KING CRAB

### Introduction

The Westward Region king crab fisheries are separated into six registration areas known as Area K (Kodiak), Area M (South Peninsula), Area O (Dutch Harbor), Area R (Adak), Area T (Bristol Bay), and Area Q (Bering Sea), Figure 1. These fisheries are currently managed by the State of Alaska, but four of the six (O, R, T, Q) are scheduled to be managed by the Council. This report will present a historical perspective, current fisheries and stock status of the Westward Region king crab fisheries.

### Historical Background

The king crab fisheries began in Area M in 1950, when two million pounds were harvested. During the period 1950 to 1959 the Region produced 71 million pounds. From 1960 to 1969, 773 million pounds were harvested and from 1970 to 1979 900 million were harvested (Figure 2).

In 1980 a harvest of 189 million pounds was landed which decreased to 85 million pounds in 1981 and further declined to 38 million pounds in 1982 (Figure 2). The projected harvest for 1983 is for 25 million pounds, the lowest regional catch since 1959.

## BERING SEA AREA "Q"

### Norton Sound Section - 1983-84 Season

The season opened on August 1 and closed on August 5. The harvest guideline was set at 300,000 pounds. A fleet of 23 vessels harvested 368,032 pounds. The average weight per crab was 2.3 pounds and catch per pot was



12 crab. The 1982 harvest was 228,921 pounds with crab averaging six per pot and weighing 3.6 pounds.

### Stock Status

The 1983 Norton Sound red king crab stock is increasing with a population of legal male crab estimated to be between 1.6 and 2.6 million pounds. The 1983 fishery catch was comprised of 55 percent recruit crab.

### Northern District 1983-84 Season

The season was scheduled to be opened on August 20, but was closed by emergency order until August 23. The season was closed in order to allow removal of the Tanner crab pots fishing on the blue king crab grounds. The fishery was again delayed because of a price dispute, which was settled on August 31.

A pre-season forecast was for a harvest of six to eight million pounds based on the 1983 National Marine Fisheries Service trawl survey. The preliminary 1983 harvest was 9.5 million pounds caught by 160 vessels. The crab averaged 4.8 pounds and CPUE was 12 crab per pot. The season around St. Matthew was closed on September 6. However, the remaining portion of the General Section was opened on September 13 and closed September 22. No catch figures are available at the time of this report.

### Stock Status

The 1983 NMFS trawl survey calculated that 1.9 million prerecruits were on the grounds compared with 3.4 million legals. The fishery removed 1.9 million crab this year, equal to the possible recruitment in 1984. It appears that the 1984 estimate will be somewhat lower than 1983.

### Pribilof District

The district will open to fishing on October 1 with a preseason harvest guideline of two to four million pounds. The vessel effort should be extremely large causing a very short fishing period.

### Stock Status

The legal population is at 1.2 million males, down one million from 1982 estimates, and recruitment for the 1984 fishery is down by 200,000 crab.

### BRISTOL BAY AREA "T"

The red king crab fishery will not open as scheduled on October 1. An emergency order was issued on September 14 closing the 1983 fishery.

### Stock Status

The population of female crab is at 9.6 million, 11 million animals below the number needed. The number of legal crab is at 1.5 million animals, the lowest ever recorded by a survey. The total population is at its lowest level.

### DUTCH HARBOR AREA "O"

#### Red King Crab

The season is scheduled to open on November 10. However, information obtained from the 1982/83 commercial catch would indicate the fishery should probably be closed. The Department will survey the area at the end of September. Any results should be available by October 10.

#### Stock Status

The red king crab populations appear to be severely depressed. Information collected in 1982/83 suggests that the area also has serious female fecundity problems and chances of large area closures for the 1983-84 season are possible.

#### Brown King Crab

The season will open on November 10. With the decline in red king crab stocks greater effort is expected to occur in 1983-84. The brown king crab averaged 5.2 pounds each, and the average catch per pot was eight crab in the 1982/83 fishery.

### Stock Status

Very little is known about brown king crab in the area. The only information available has been obtained by vessel interviews, which indicate to date fishing has occurred in the Western District. The possibility of crab being available in other areas is highly probable.

## ADAK AREA "R"

### Red King Crab

The fishery will open on November 10. A large increase in effort is expected by vessels from Kodiak and Bristol Bay.

### Stock Status

The stock appears fairly stable and a .5 to 3 million pound harvest is forecast for 1983-84 season.

### Brown King Crab

The season will open on November 10 .

### Stock Status

Very little is known about abundance, but not all areas have been fished. The 1982/83 catch was 7.9 million pounds taken from November to April. It is quite possible this catch could be repeated in 1983/84 season.

### Kodiak (Area K)

The 1983/84 red king crab fishery was closed by an emergency order issued on September 14. Brown king crab permits were issued beginning September 19.

### Stock Status

All stocks are severely depressed, both legal and sublegal crab are at their lowest levels. This information was obtained from a survey conducted by ADF&G in July and August of 1983. It also appears that the stocks will continue to decline, as few prerecruit crab were caught.

### South Peninsula (Area M)

The South Peninsula fishery was closed by an emergency order issued September 22, 1983.

### Stock Status

ADF&G survey results obtained in September of 1983 indicate Area M king crab stocks at their lowest levels since survey estimates began. In addition certain areas are experiencing 30 percent barren females. Also, few prerecruits are available in the population.

## SUMMARY

- (1) Red king crab stocks peaked in 1980 and began declining in 1981.
- (2) All available data suggests that red king crab stocks will continue to decline for at least three years.
- (3) In 1982-83 the Westward Region catch was 38.4 million pounds of king crab comprised of 42 percent red king crab, 34 percent blue king crab and 24 percent brown king crab.
- (4) The projected 1983-1984 king crab catch is 25 million pounds.

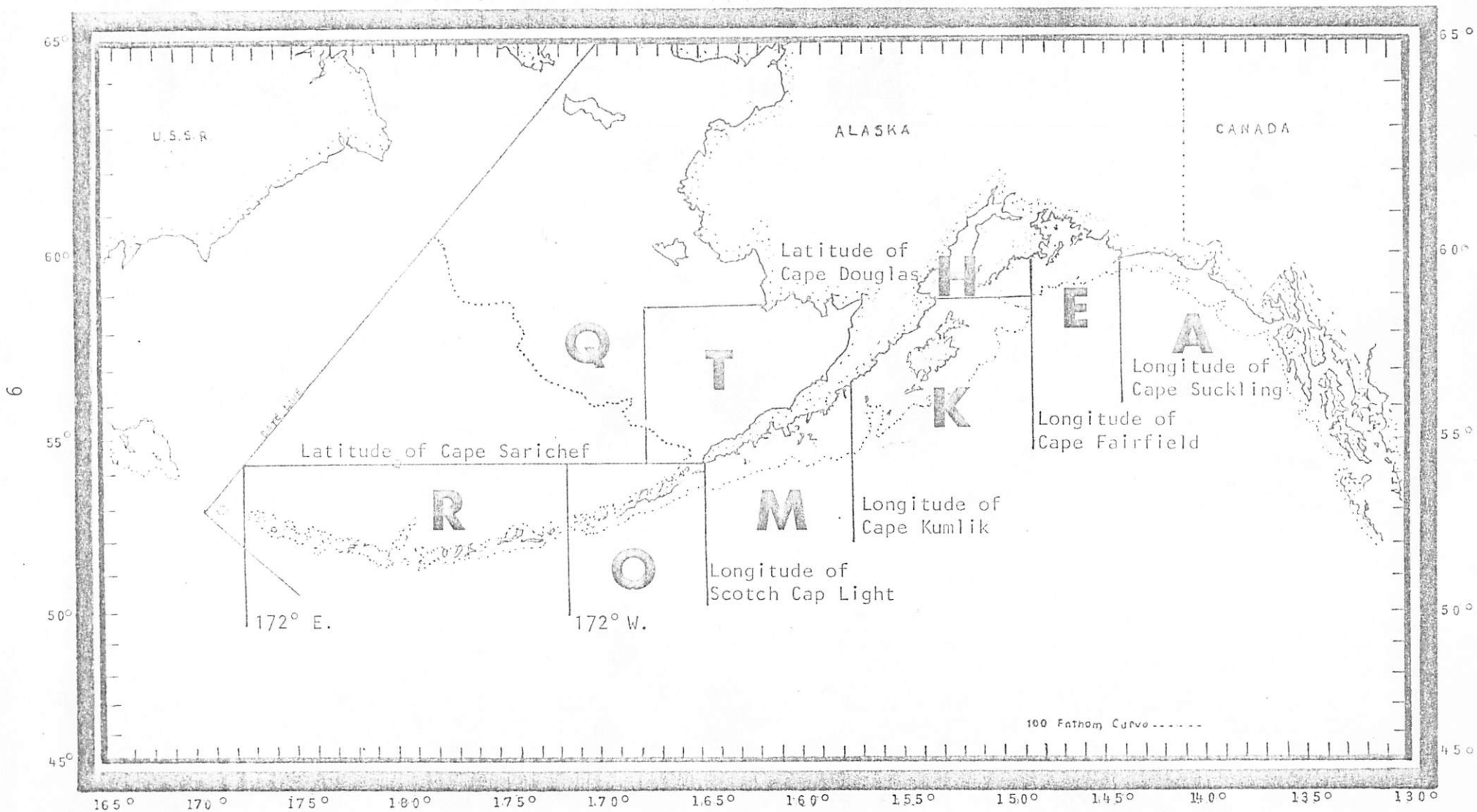


Figure 1. King crab statistical areas:

- |                          |                  |
|--------------------------|------------------|
| A - Southeastern Alaska  | O - Dutch Harbor |
| E - Prince William Sound | R - Adak         |
| H - Cook Inlet           | Q - Bering Sea   |
| K - Kodiak               | T - Bristol Bay  |
| M - Alaska Peninsula     |                  |

M I L L I O N S O F P O U N D S

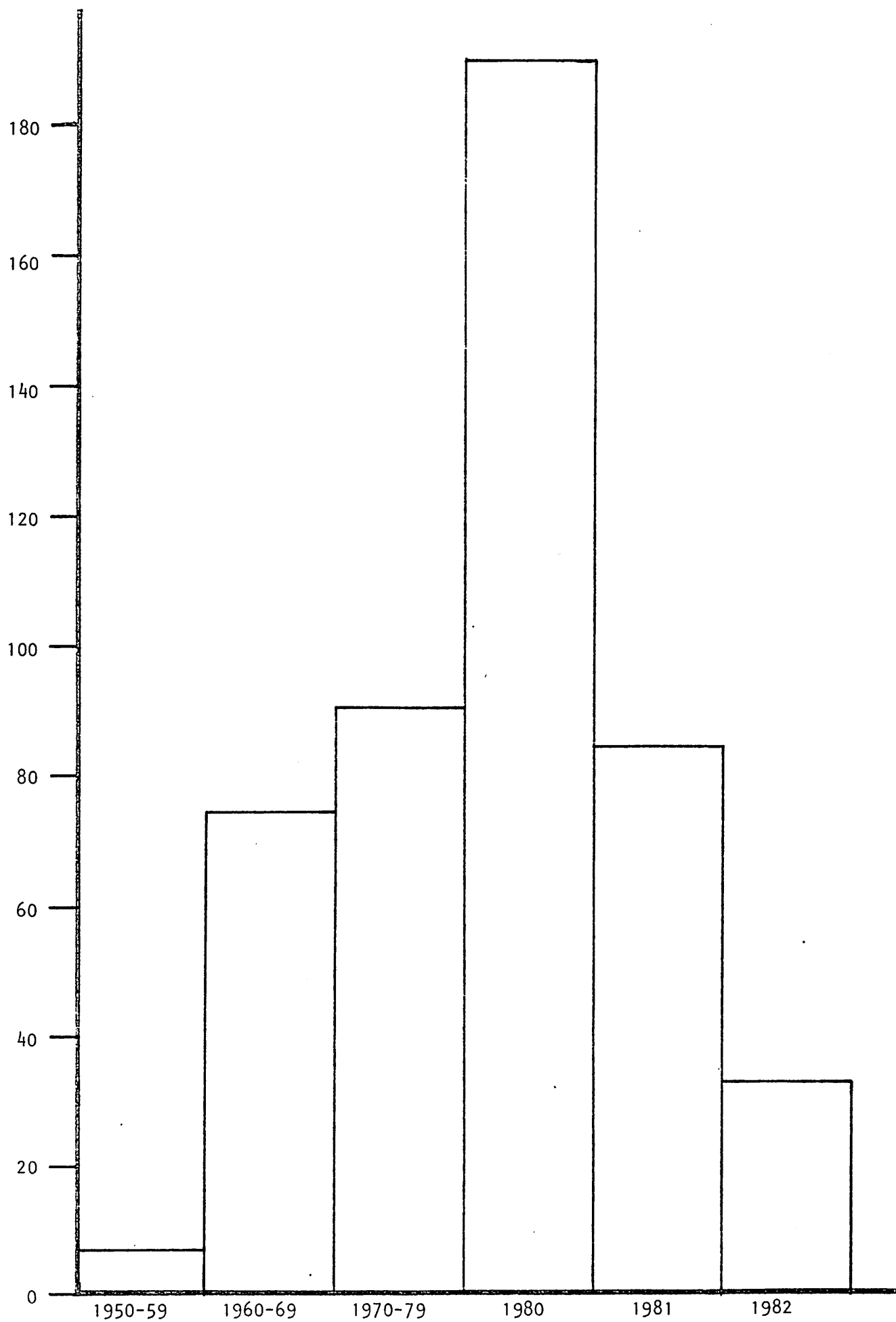


Figure 2. Westward Region king crab catches.



Table 1. Historical king crab catch by registration area for Alaska's Westward Region (in thousands of pounds), 1950 to 1982.

Year	K		M		O		R		Q		T		U.S.		Foreign		Total
	Kodiak	Chignik South Pen	Unalaska	W. Aleutian	Adak	Bering Sea	Bristol Bay	U.S.	Foreign	Total							
1950	60.0	2,124.0	NF	NF	NF	NF	NF	2,184.0	0	2,184.0	0	2,184.0	0	2,184.0	0	2,184.0	
1951	200.0	599.0	NF	NF	NF	NF	NF	799.0	0	799.0	0	799.0	0	799.0	0	799.0	
1952	400.0	298.0	NF	NF	NF	NF	NF	698.0	0	698.0	0	698.0	0	698.0	0	698.0	
1953	900.0	380.0	NF	NF	NF	NF	NF	3,280.0	11,356.0	3,280.0	11,356.0	14,636.0	0	14,636.0	0	14,636.0	
1954	4,000.0	317.0	NF	NF	NF	NF	NF	6,646.0	8,086.0	6,646.0	8,086.0	14,732.0	0	14,732.0	0	14,732.0	
1955	2,000.0	1,641.0	NF	NF	NF	NF	NF	5,519.0	8,693.0	5,519.0	8,693.0	14,212.0	0	14,212.0	0	14,212.0	
1956	4,800.0	4,221.0	NF	NF	NF	NF	NF	10,917.0	8,308.0	10,917.0	8,308.0	19,225.0	0	19,225.0	0	19,225.0	
1957	5,000.0	6,687.0	NF	NF	NF	NF	NF	12,275.0	3,548.0	12,275.0	3,548.0	20,823.0	0	20,823.0	0	20,823.0	
1958	5,200.0	7,246.0	NF	NF	NF	NF	NF	12,453.0	8,136.0	12,453.0	8,136.0	20,589.0	0	20,589.0	0	20,589.0	
1959	10,200.0	6,167.0	NF	NF	NF	NF	NF	16,367.0	11,602.0	16,367.0	11,602.0	27,969.0	0	27,969.0	0	27,969.0	
Subtotal	32,760.0	29,680.0	-	-	-	-	-	71,138.0	64,729.0	71,138.0	64,729.0	135,867.0	0	135,867.0	0	135,867.0	
Average	3,276.0	2,968.0	-	-	-	-	-	7,113.8	9,247.0	7,113.8	9,247.0	13,586.7	0	13,586.7	0	13,586.7	
1960-61	21,064.8	6,700.0	NF	2,093.7	2,093.7	NF	598.0	30,456.5	24,611.0	30,456.5	24,611.0	55,067.5	0	55,067.5	0	55,067.5	
1961-62	28,962.9	3,900.0	533.0	4,776.0	4,776.0	NF	459.0	38,630.9	40,404.0	38,630.9	40,404.0	79,034.9	0	79,034.9	0	79,034.9	
1962-63	37,626.7	2,273.0	1,536.0	8,006.5	8,006.5	NF	74.0	49,543.2	49,516.2	49,543.2	49,516.2	102,782.2	0	102,782.2	0	102,782.2	
1963-64	37,716.2	6,539.0	3,893.0	17,903.7	17,903.7	NF	747.0	66,798.9	56,671.0	66,798.9	56,671.0	123,469.9	0	123,469.9	0	123,469.9	
1964-65	41,596.5	14,354.0	13,761.0	21,193.8	21,193.8	NF	910.0	91,815.3	63,076.0	91,815.3	63,076.0	154,891.3	0	154,891.3	0	154,891.3	
1965-66	94,431.0	14,713.0	19,196.0	8,040.4	8,040.4	NF	1,762.0	138,142.4	41,405.0	138,142.4	41,405.0	179,547.4	0	179,547.4	0	179,547.4	
1966-67	73,817.8	22,577.0	32,852.0	5,883.1	5,883.1	NF	997.0	136,126.9	43,998.0	136,126.9	43,998.0	180,124.9	0	180,124.9	0	180,124.9	
1967-68	43,448.5	17,252.0	22,709.0	16,948.9	16,948.9	NF	3,102.0	103,460.4	32,528.0	103,460.4	32,528.0	135,988.4	0	135,988.4	0	135,988.4	
1968-69	18,211.4	10,944.0	11,300.0	19,874.8	19,874.8	NF	8,687.0	69,017.2	27,681.0	69,017.2	27,681.0	96,698.2	0	96,698.2	0	96,698.2	
1969-70	12,200.5	4,137.0	8,950.0	19,055.4	19,055.4	NF	10,403.0	54,745.9	14,113.0	54,745.9	14,113.0	68,858.9	0	68,858.9	0	68,858.9	
Subtotal	409,076.3	103,389.0	114,730.0	123,776.3	123,776.3	-	27,739.0	778,710.6	397,753.0	778,710.6	397,753.0	1,176,463.6	0	1,176,463.6	0	1,176,463.6	
Average	40,907.6	10,338.9	12,747.8	12,377.6	12,377.6	-	2,773.9	77,871.1	39,775.3	77,871.1	39,775.3	117,646.4	0	117,646.4	0	117,646.4	

Table 1. (continued) Historical king crab catch by registration area for Alaska's Westward Region (in thousands of pounds), 1950 to 1982.

Year	K Kodiak	M Chignik South Pen	O Unalaska	R Adak W.Aleutian	Q Bering Sea	T Bristol Bay	U.S.	Foreign	Total
1970-71	11,719.9	3,425.7	9,652.0	16,557.0	NF	8,559.0	49,913.6	12,930.0	62,843.6
1971-72	10,884.1	4,123.1	9,391.6	15,475.9	NF	12,995.0	52,869.7	6,188.0	59,057.7
1972-73	15,479.9	4,069.3	10,450.4	18,746.2	NF	21,744.9	70,490.7	4,721.0	75,211.7
1973-74	14,397.3	4,260.6	12,722.7	9,761.0	1,276.6	26,913.6	69,331.8	1,279.0	70,610.8
1974-75	23,582.7	4,572.1	13,991.1	2,754.5	7,107.3	42,266.3	94,274.0	2,618.0	96,892.0
1975-76	24,061.6	2,605.3	15,906.6	414.0	2,433.7	51,326.2	96,747.4	NF	96,747.4
1976-77	17,966.8	958.8	10,198.4	CLOSED	8,356.1	63,919.7	101,130.4	NF	101,130.4
1977-78	13,503.6	726.3	3,684.4	952.9	5,732.9	69,967.8	94,567.9	NF	94,567.9
1978-79	12,021.8	3,093.8	6,824.1	808.3	9,567.4	87,618.3	119,933.7	NF	119,933.7
1979-80	14,608.9	4,453.5	14,979.9	490.7	9,286.4	107,828.0	151,647.4	NF	151,647.4
Subtotal <sup>12</sup>	158,226.6	32,019.1	107,801.2	65,960.5	43,760.4	493,138.8	900,906.6	27,736.0	928,642.6
Average	15,822.6	3,201.9	10,780.1	6,596.0	6,251.5	49,313.9	90,090.7	5,547.2	92,864.3
1980-81	20,448.6	5,080.6	18,902.5	1,419.5	13,869.9	129,947.7	189,423.3	NF	189,423.3
1981-82	24,237.6	3,147.5	5,115.3	2,774.0	16,425.6	33,591.4	85,291.4	NF	85,291.4
Subtotal	44,686.2	8,228.1	24,017.8	4,193.5	30,295.5	163,539.1	274,960.2	NF	274,960.2
Average	22,343.1	4,114.0	12,008.9	1,096.7	15,147.7	81,769.5	137,480.1	-	137,480.1
1982-83	8,729.7	1,627.7	1,628.0	9,644.2 <sup>1</sup>	13,815.9	3,000.2	38,445.7	NF	38,445.7
GRAND TOTAL	653,478.8	174,943.9	248,177.0	290,374.5	87,871.8	696,115.1	2,150,961.0	490,218.0	2,641,179.0
AVERAGE	19,802.4	5,301.3	11,280.7	13,198.8	8,787.2	24,003.9	65,180.6	22,282.6	80,035.7

<sup>1</sup>Through July 30, 1983.

Table 2. Westward Region king crab fisheries 1983-84.

S E P T E M B E R      1 9 8 3			
<u>Registration Area</u>	<u>Species</u>	<u>Season</u>	<u>Harvest</u>
Kodiak (K)	Red	Closed E.O. 9/14	-0-
	Brown	Year around permit required.	.2 <sup>1</sup>
South Peninsula (M)	Red	Closed E.O. 9/23	-0-
Dutch Harbor (O)	Red	November 10	-0- <sup>2</sup>
	Brown	November 10	2.0 <sup>1</sup>
Adak (R)	Red	November 10	2.0 <sup>1</sup>
	Brown	November 10	5.0 <sup>1</sup>
Bering Sea (Q)			
Pribilof District	Red	October 1	.2 <sup>1</sup>
	Blue	October 1	3.0 <sup>1</sup>
	Brown	October 1	1.0 <sup>1</sup>
Northern District	Blue	Aug. 23-Sept. 22	9.5 <sup>1</sup>
	Brown	May	2.0 <sup>1</sup>
Norton Sound	Red	Aug. 1-Aug. 5	.4
Bristol Bay (T)	Red	Closed E.O. 9/14	-0-
	Blue	Closed E.O. 9/14	-0-
	Brown	Closed E.O. 9/14	-0-
TOTAL			25.3

<sup>1</sup>Projections.

<sup>2</sup>Possible closure - depends on survey to be completed October 10.