#### MEMORANDUM

DATE: February 4, 1980

TO: Council Members, Scientific & Statistical Committee

and Advisory Panel

FROM: Jim H. Branson, Executive Director

SUBJECT: Tanner Crab off Alaska FMP

#### ACTION REQUIRED

<u>Discussion</u> of Alaska Board of Fisheries Tanner Crab Resolution and the status of our last amendment. Propose change in FMP to close Tanner crab season by field announcement.

#### BACKGROUND

At the last meeting, the Council deferred action on the Board of Fisheries proposal changing the closing date of the  $\underline{C}$ .  $\underline{opilio}$  season from September 3rd to August 15th.

Because of the conflicting closing dates between the Council and the State for the  $\underline{C}$ .  $\underline{opilio}$  season, the Board of Fisheries has offered a Resolution to provide some flexibility in the State's closing date for the  $\underline{C}$ .  $\underline{opilio}$  season in the Bering Sea. The Resolution (Attachment 1) calls for the Commissioner of the Alaska Department of Fish and Game to exercise his emergency authority to extend the  $\underline{C}$ .  $\underline{opilio}$  season beyond August 15, 1980, if by that date the domestic harvest has not yet achieved a harvest level consistent with sound biological management principles and that such an extension is determined to be in the broad public interest.

The intent of the Resolution appears to go a long ways toward resolving the difficulty of conflicting policies. However, the Resolution is not precise regarding the rationale that will be used to close the opilio season when the king crab opening is rapidly approaching.

Our FMP now closes the Tanner crab season on September 3 (August 15 under State Regulations) and gives fishermen 72 hours to remove their gear from the grounds. The king crab season opens September 10 with tank inspection beginning 116 hours later. September 3, closure; September 6, gear off the grounds; September 10, king crab gear in place; September 15, tank inspection. We should probably consider changing the Tanner crab season to an open end system closed by field announcement based on established criteria (would need to establish) in order to allow better coordination of State and Federal regulations.

This issue could be proposed as an agenda item for a joint Board/Council meeting for late March.

On January 15th we received a belated set of comments on the Specific problems relating to the approval of Amendment 5 to the Fishery Management Plan for the Tanner Crab (FMP). The comments and objections came 63 days after receipt of the amendment by the National Marine Fisheries Service. We responded with a January 28th letter to Terry Leitzell which I hand-carried to Washington, D.C. last week. It appears that most of the substantive issues have been cleared up but a delay can be expected in the implementation of the amendment. Both letters are attached.

HIM

#### ALASKA BOARD OF FISHERIES

#### Resolution 80-67-FB

#### Regarding Tanner Crab in the Bering Sea

WHEREAS, the Alaska Board of Fisheries and the North Pacific Fishery Management Council held a joint meeting on December 13, 1979, and discussed the Bering Sea tanner crab fishery; and

WHEREAS, the Board of Fisheries has adopted regulations to close the Bering Sea tanner crab fishery on August 15, 1980, because

- (a) all indications show that industry will take the allowable harvest well before August 15,
- (b) the overwhelming weight of public testimony presented to the Board was concerned with an equitable start of the king crab season. In order to achieve an equitable start of the king crab season, it is necessary to require removal of all gear from the fishing grounds prior to the start of the king crab season,
- (c) a workable enforcement strategy is needed which alleviates the burden of pulling each pot to determine if it is fishing prior to the beginning of the season,
- (d) it is biologically sound to prevent the fleet from fishing early and stockpiling crab. Stockpiling reduces the viability of the crab and increases wasteful deadloss,
- (e) the vast majority of the tanner crab gear is removed from the fishing grounds by the fishermen in order to lessen gear loss.

NOW THEREFORE BE IT RESOLVED that the Alaska Board of Fisheries requests the Commissioner of the Alaska Department of Fish and Game to exercise his Emergency Order authority granted under Alaska Statute 16.05.060 to extend the C. opilio season beyond August 15, 1980, if by that date the domestic harvest has not yet achieved a harvest level consistent with sound biological management principles and such an extension is determined to be in the broad public interest.

ADOPTED: January 11, 1980

Anchorage, Alaska

Nick Szabo, Chairfan

Alaska Board of Fisheries

VOTE: 6/0

January 28, 1980

Mr. Terry L. Leitzell, Assistant Administrator for Fisheries National Marine Fisheries Service 3300 Whitehaven Street, Page Bldg. 2 Washington, D.C. 20235

Dear Terry,

On January 15th, we received from FAK a copy of your comments on Specific problems relating to the approval of amendment #5 to the Fishery Management Plan for Tanner crab (FMP). We have studied them, with frequent conferences with the Alaska Region, NMFS. I fail to find many substantial comments. Most of the questions raised are answerable by anyone familiar with the development of the plan or the management of the fishery.

I understand that the Region is developing a regulatory analysis as required by Executive Order 12044 which will probably answer some of the points raised by Karen Davidson.

I have carefully gone over the environmental assessment which led to the "negative declaration of environmental impact" for the fourth or fifth time. While I am sure it can be beefed up, (as almost any piece of work can if you have the time), it still appears to be an acceptable environmental assessment. It's certainly more complete than the one published in the Federal Register on December 18th, for the Bering Sea and Aleutian Islands Trawl and Herring Gillnet PMP.

We have gone through our amendment package and expanded the discussion and justification for several of the issues that were listed as possibly affecting the approvability of the amendment. They are contained in the "addendum to the amendment" package submitted with this letter. We have refrained from repeatedly addressing the same points in the plan, introduction and environmental assessment. Careful reading of the entire addendum should resolve most of the questions in any reviewers mind. Several of the comments are somewhat difficult to respond to since they are not very specific; for instance "the amendment does not contain adequate justification for the revision and for the selection of management options" or "the draft regulations accompanying the preamble are not adequate" are two examples.

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I would like to make the following comments on points raised under the sub-heading The Negative Declaration of Environmental Impact is inadequate,

- 1) The amendment to the plan takes into account changes in the resource and increases in the U.S. fishery in the Bering Sea. I think those points are evident and adequately discussed in the environmental assessment. It was our assumption that by treating the FMP, the environmental impact statement, the environmental assessment, and summary as a single document we would not have to repeat every statement and every argument in every section of that package.
- 2) Foreign vessels are allowed to retain <u>C. bairdi</u> north of 58° north latitude. I have expanded the discussion of that point in the amendment addendum.
- 3) The U.S. Tanner crab fishery will not be closed when the OY for <u>C</u>. <u>bairdi</u> is reached for the same practical management reasons that the season is not closed for Tanner crab when the OY for King crab is reached. Species for which there is no open season will be discarded, as they always have been.
- 4) The statement that "harvests impact marine life" is a generalization from a section that does not need to be explained. The request for an explanation as to "why the current OY is considered expectable from this point of view" is puzzling -- what is being asked?
- 5) A discussion of the "incidental catch of crab in other fisheries" is found in the body of the plan and the addendum.
- An increased fishery for <u>C. opilio</u> will not significantly extend the range from the processing plants in Dutch Harbor and Akutan; it will simply occur in some new directions. We are not aware of possible processing delays. The plan states that the processing capabilities are there and the King crab fishery has demonstrated a capability for harvesting and processing great quantities of crab in a short time.
- 7) The Environmental Protection Agency is monitoring pollution levels in the areas where crab and fish are processed. This question was addressed in the initial EIS for this FMP.
- 8/9) The cause of the Tanner crab population decline is something we would all like to know. American fishermen attribute it to foreign trawling. Scientists attribute it to natural causes. Our management regime is very conservative—it protects all females and males through at least one year of breeding. We shouldn't halt the fishery while we debate this issue.

#### Issues affecting the approvability of the FMP

First I must clarify that the FMP has been approved and that we are speaking to the amendment.

- The reason for stating the <u>C. bairdi</u> OY as a range and <u>C. opilio</u> OY as a point figure has been expanded in the addendum (F 6.1). We've not been able to develop a way of assigning a range to OY if there is going to be surplus that will be allocated to a foreign fishery. This is true in all of the FMP's. A discussion on how the U.S. fishery will be closed within the the specified range is already in the plan and was used to close the fishery four times during 1979.
- 2) I don't understand this question regarding the catch of <u>C. opilio</u> when the <u>C. bairdi</u> fishery is closed. All crab pot fisheries catch several different species of crab; some of which may be prohibited and are simply discarded as the fishery for the open species continues until that catch limit is reached.

## Adequacy of the specification of DAH of C. opilio

1) We have speculated on the Tanner crab market question for three years. We know that <u>C. opilio</u> is interchangeable in some foreign markets with <u>C. bairdi</u>. I don't think we can make the assumption that Tanner crab prices will not decline if the general crab market declines. Since much of the Tanner crab and King crab market is in Japan many of the cold storage holdings are also in Japan, and even the Japanese don't have any idea how to compute those holdings and their protential impacts.

Most of the comments have been addressed in the addendum package accompanying this letter.

The whole package of comments from the Central Office displays a somewhat remarkable naivete. I can't help but think that many of them should have already been answered by the Region's comments (11-30-79) and by the Central Office staff who were present at the Council meeting when all this was debated.

Time does not allow endless reiteration of material already discussed and approved in the FMP. An amendment therefore, must necessarily refer to that FMP for the fundamental rationale and justification. The initial FMP obviously was not perfect. But we can not go back and make it perfect or even bring it up to the state we might desire for an amendment that has to be in place for fishing season that is starting now and will soon be over.

I have one more serious objection. We received this comment package sixty-three days after your office received amendment #5 to begin the Secretarial review. If we had had your comments within twenty-five or thirty days after the date of submission, we would have had time to spend on the more substantive comments. In the interest of implementing the amendment as soon as possible, we must react to your comments hastily, at a time when we have a very full schedule on other FMP's. We sent the Tanner crab amendment to you expecting that it would go through the normal sixty days process, followed by its publication as a notice of proposed rule making etc., to be in place by mid-March when we can expect the foreign fishery to start. That expectation appears to be unfounded. We must schedule our work on the basis of the review and implementation procedure in your operational guidelines, if those guidelines for timing are not followed closely we will not be able to amend FMP's to allow normal fishing operations.

I expect to be in Washington on February 1st and would like an opportunity to discuss this matter with you and your staff.

Sincerely,

Jim H. Branson Executive Director

cc: Bill Gordon Jim Brooks

# TANNER CRAB AMENDMENT # 5 ADDENDUM

#### Introduction

1) p. 2 (a). Delete "TALFF (initial) = OY-DAH-JVP" and add "TALFF (initial) = OY-DAH"

#### Fishery management plan

- 2) p. 2-4. B 2. Add, after "...Conservation Zone," "DAH = DAP + JVP".
- 3) p. 2-4. c. Delete "...is determined by deducting DAH + JVP
  from OY (TALFF = OY-DAH-JVP)" and add
  "...is determined by deducting DAH from OY (TALFF = OY DAH)."
- 4) p. 3-3. Section 3.2.1.3. After "...125 million pounds in 1978", add "In 1979, the total catch was approximately 145 million pounds with a dramatic increase in <u>C. opilio</u> crabs, from 1.3 million to over 30 million pounds. <u>C. bairdi</u> catches were reduced because of lower resource abundance in the Bering Sea."
- 5) p. 7-1. Section 7.0. Add new paragraph after "...U.S. Fishery Conservation Zone." as follows.

  "Some <u>C. bairdi</u> will be caught by the Japanese fishery North of 58° N. latitude in the Bering Sea. Historically, the proportions of that species in the crab catch of that area has ranged from 8-12%, the rest being <u>C. opilio</u>. Retention of <u>C. bairdi</u> by the Japanese fishery is permitted, since the amount taken is expected to be minimal. The impact on the resource of the removal of that number of mature males (immature males are not of marketable size), is not expected to have any deleterious effect on the scattered stocks of <u>C. bairdi</u> in this area which is the northern periphery of its range. <u>C. bairdi</u> is so

- sparsely distributed in this area that no directed fishery for them by the U.S. fishermen will be feasible."
- 6) p. B-12. Section B. 6.1. Delete "The estimated ABC of 3-7 million pounds (1,360-3,175 mt) includes the estimated MSY." Add "The estimated ABC of 3-7 million pounds (1,360-3,175 mt) approaches the estimated MSY."
- 7) p. F-4. Section F.3.2.2.2. Delete "The Japanese were permitted to harvest 9,700,000 pounds (4,400 mt) of their total quota of Tanner crab from the area west of 173° W. longitude and north of 58° N. latitude" and add "The Japanese were permitted to harvest their quota in the area west of 164° W. longitude and north of 56° N. latitude."
- 8) p. F-4. Section F.3.2.2.2. Third paragraph, Delete "...north of 58° N. latitude for <u>C. opilio</u>" and add "...north of 58° N. latitude and west of 164° W. longitude. Most of the catch is expected to be <u>C. opilio</u> (88-92%) with incidentally caught C. bairdi allowed to be retained."
- 9) p. F-5. Section F.3.2.2.4. Delete "...and delivered daily to the factoryship." and add "...and delivered once or twice a day to the factoryship."
- p. F-5. Section F.3.3.1. Delete "...Alaska Department of
  Fish and Game manages the domestic" and add
  "...Alaska Department of Fish and Game has managed the domestic..."
- 11) P. F-7. Section F.3.3.3.1. Last paragraph, Delete "A pair of U. S. observers monitored catches of both Japanese... entire 1977 fishery." and add
  "....A pair of U. S. observers monitored catches of each of the Japanese...entire 1977, 1978 and 1979 fisheries."

- 12) p. F-7. Section F.3.5.1.1. After "...in 1976 was \$4.4 million."
   add
   "In 1979, it was \$32.7 million."
- p. F-8. Section F.3.5.2. Before "Data for the Bering Sea..."
  add
  "Complete up-to-date data..."
- 14) p. F-8. Section F.3.5.2. After "...statewide section." add "U. S. catching capacity has been increasing rapidly for the last 3 years. In 1972, 240 boats engaged in the King crab fishery in this area, an increase of 20 from 1978. Most of the boats in the fishery are new combination trawler/crabbers with size increasing annualy. Most new additions to the fleet are in the 110' to 160' range with increased fishing power from the older portion of the fleet which averages approximately 95' in length. The greatest proportional increase has been in the catcher/ processor category, from 3 in 1978, to 13 in 1979. Generally larger ships, 12' to 160' the catcher/processor remain on the grounds during the season, usually processing all of their catch by cooking and freezing in sections. It is expected that all of the ships in the King crab fishery, will engage in the Tanner crab fishery in 1980 with the exception of a few who will turn to bottomfish, plus some new construction entering the fleet since the King crab season. The influx of catcher/processors into this fishery adds a new dimension to management of this resource. Dockside inspection of catches to insure compliance with size and sea regulations will not be possible since the catch is butchered and processed at sea. Sex and size cannot be determined from the finished product."
  - 15) p. F-9. Section F. 4.2. After ".... <u>C. bairdi</u> being the...."

    Add

    "...preferred..."

- 16) p. F-12. Section F. 4.8. Delete "The stock of <u>C. opilio</u> appears stable at the current level" and add

  "The stock of <u>C. opilio</u> appears relatively stable."
- 17) p. F-12. Section F. 4.8. Delete ". . .the abundance of pre-recuits was lower in 1979 and suggests..." and add
  "...the abundance of pre-recuits was lower in the 1979 NMFS surveys and suggests..."
- p. F-13. Section F. 6.1. After "...126 million pounds, (57,150 mt) add
  "...ABC for <u>C. opilio</u> is expressed as a point figure rather than a range to simplify the derivation of TALFF.
  While expression of ABC and OY as a range is probably sounder biologicaly, considering the paucity of accurate information about this species, a point figure on the safe, or conservative side of a range will not adversely affect the stocks or impair the proposed fisheries. It greatly simplifies the derivation of TALFF in a fishery where some excess of OY is expected over DAH and is used in all FMP's where that condition exists."
- 19) p. F-13. Section F. 6.2.c. Change "... <u>C. opilio</u> population exceeds domestic industry size requirements, the U.S. fishery for Tanner crab is therefore primarily for <u>C. bairdi</u>." to "... <u>C. opilio</u> populations exceeds previous domestic industry size preferences, the U. S. fishery for Tanner crab has been primarily for <u>C. bairdi</u>."
- 20) p. F-13. Section F. 6.2.c After "...primarily for <u>C. bairdi</u>." add new paragraph

  "Declining stocks of <u>C. bairdi</u>, expanding market opportunities for Tanner crab, and improved processing techniques for the smaller <u>C. opilio</u> are overcoming the U.S. processors reluctance to buy <u>C. opilio</u>. It is expected they will make up an increasingly larger proportion of the U.S. catch in the future. As noted earlier, the U.S. <u>C. opilio</u> catch increased from 1.8 million pounds in 1978 to 34 million pounds in 1979. On at least some

markets, the two species of Tanner crab are interchangeable, larger <u>C</u>. <u>opilio</u> sections are indistinguishable from <u>C</u>. <u>bairdi</u> sections and the meat from both species in all size ranges is the same in all known tests.

Processor resistance to <u>C. opilio</u> in the part has been largely from the added costs of processing more crab for the same amount of product and some processing problems with small crab because of the configuration of existing processing machinery and procedures. That resistance is being overcome by price differentials to the fishermen between the two species and new processing equipment or adjustments to existing equipment and procedures."

p. F-16. Section 7.0. After the third paragraph, add 21) "1979 NMFS surveys showed approximately 6% of the male C. opilio are greater than 104 mm, north of 58° N. latitude. Using an OY of 130,000,000 pounds (59,037 mt), this is only 7,800,000 pounds (3,542 mt), well under the 16,530,000 pounds (75,000 mt) established as TALFF. There is reason to believe the survey did not, for undetermined reasons, sample that northern area adequately. The Japanese fishery took over 12,000 metric tons in that area in 1979, with no appreciable drop in CPUE by the end of the season. The Japanese fishery also takes C. opilio to a size of 100 mm carapace width, one age class lower than used in preceding computations of ABC/OY. Considering these facts, it is probable that the 1980 fishery will be able to take the full 7,500 metric tons allocated without any harm to the resource. Even C. opilio of 100 mm carapace width have been breeding for two or more years. Heavy cropping of that and older age classes is not likely to affect the spawning success of the crab populations."

#### Environmental Assessment

- 22) p. 3. After the last sentence in the second paragraph, add "The area south of 58° N. latitude and west of 173° W. Longitude open to foreign fishing in 1979 has been eliminated. Expansion of the U. S. Tanner crab fishery will undoubtedly put American fishing effort in that area in 1980 and subsequent years. Closure to the foreign fishery will prevent any gear conflicts between U. S. and foreign crab fishermen."
- 23) p. 5 Delete p. 5 and add new page 5 as follows
  "The possibility of a zero TALFF was rejected due to the inability
  to establish a fair and equitable method of releasing unused/reserve
  DAH amounts for allocation to the foreign allowable catch.

A second consideration was the difficulty in establishing what affect the possibility of a mid-season increase in TALFF would have on the Japanese marketplace. Anticipation that large catches of Tanner crab might be available from their own fleets later in the season might very well inhibit Japanese purchases of the American catch until final TALFF could be ascertained. This could lead to a depressed early season market and great reluctance on the part of U.S. processors to buy heavily from U.S. fishermen.

#### Recommendation

Having reviewed the Environmental Impact Assessment and considered..."



# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 1668 Juneau, Alaska 99802

January 15, 1980

Mr. Jim Branson, Executive Director North Pacific Fishery Management Council P.O. Box 3136 DT Anchorage, AK 99510

Dear Jim:

As Bob McVey indicated to you in a telephone conversation today, we have received a list of Central Office concerns and problems with Amendment No. 5 to the Bering Sea Tanner Crab FMP. A copy is attached. The list is extensive, but based on a conference call with Bill Gordon and his staff yesterday, we believe additional material will answer virtually all the listed items. Answers or responses would be divided between (1) our regulatory analysis, which Jim Brooks is now preparing, (2) additions to the NEPA negative declaration, and (3) modifications to Amendment No. 5 itself. Much of the additional needed information is explanatory or in the nature of further justification. Some of the concerns relate to the basic FMP as well as the amendment and appear to be bridges we thought we had already crossed. Nonetheless taken in total, it's clear that the approvability of the plan is in question without additional supporting material.

Pat Travers is flying to Anchorage tonight and we'll ask him to hand carry this and discuss it with you. I think he has a good feel for the critical items on the list; he has volunteered to work with you and the staff on preparing the additional material. Also, he will have consulted with Jim Brooks regarding which items will be addressed in our regulatory analysis. We are also prepared to have Ron Berg assist with the negative declaration if you can use his help.

A tentative schedule for the remainder of the approval process is also attached.

Let us know how we can assist.

Sincerely yours,

Harry L. Rietze

Director, Alaska Region

Attachments





# Specific problems relating to the approval of Amendment 5 to the Fishery Management Plan for Tammer Crab (FAP)

## Significance under Executive Order 120/4 -

- The amendment is significant under E.O. 12044. The OY's are significantly different from the previous amouded FMP.
- There is a need for a regulatory analysis.
- The amendment does not contain adequate justification for the revision and for the selection of management options.

# The Negative Declaration of Environmental Impact is inadequate.

- A much more extensive discussion of what is happening, and why, is needed. There is no summary of what the amendment does; i.e., the changes it makes and the situation and management regime it is changing from. There is hardly any discussion of resource-related issues. Most of the assessment deals with economic considerations. Issues the assessment should discuss include:
  - why retention of Bairdi by foreign vessels is allowed and how this is taken into account;
- whether the entire U.S. Tanner crab lishery will be closed when the GY for Bairdi is reached, due to unavoidable Bairdi bycatch, and if not why not;
  - the platament that harvests impact marine lite should be explained, and an explanation given as to why the current OY is considered acceptable from this point of view, since OY=ABC; (F 14-15)
  - how the incidental catch of crab in other fisheries is accounted for;
  - problems, if any, of increased dead loss due to increased U.S. harvesting range or possible processing delays;
- possible changes, if any, in pollution levels and other side affacts of increased processing activity;
- impact, if any, of incidental harvests in Tanmer crab fishery on other valuable species; and
- cause of Tanner crab population decline (is it related to fishing?) and the affect of decreasing population and increased fishing on the ecosystem. This should address the effect on the increasing predominance of opilio over Bairdi; i.e., is opilio taken over some bairdi habitat?;

the effect of harvesting <u>Maird!</u> under these conditions; the possibility of increased hybridization and resulting effect on the populations if hybrids are sterile.

## Issues affecting the approvability of the FNP

Adequacy of the specification of ABC and OY -

- ABC for C. opillo is stated as a specific number, while ABC for C. Bairdi is specified as a range. No reason for the difference is given. Clarification as to what the Council intends and its justification is needed. We do not know at what setch level to close the U.S. Fishery.
- The amendment is unclear on closure for <u>C. opilio</u> when the <u>C. Bairdi</u> ov is reached. Regulations provide for such a closure and clarification of Council intent and justification are needed.

#### Adequacy of the specification of DAH for C. opilio

- Although the harvest of opilio increased dramatically from 1978-79, the total Tanner crab harvest may be levelling off. The DAH estimate seems to assume that baird1 and opilio are interchangeable in the market and that Tanner crab prices will not decline in response to decline in the king crab market. The amount and impact of present cold storage holdings is not considered. The amendment does not discuss this.
- The amendment does not indicate that available basic economic information may be necessary or required, or how it might be obtained in the future.
- The amendment does not examine the characteristics of existing vessels or vessel capacity, except by reference to the record.
- The amendment supports the conclusion that harvesting and processing capacity exists to harvest the crab but does not examine the vital role of prices and market.
- There is a total lack in the amendment of recent economic information. Needs and collection of economic data is not discussed.
- The DAH discussion is Inadequate in terms of compliance with NOAA's interim regulations implementing the presenter profesence amendment.

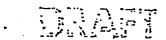
Many of these considerations could be included in an acceptable regulatory analysis.

Adequacy of justification for prohibition on foreign fishing south of 58° N. latitude.

- The amendment contains no discussion of why the provision anthorizing fishing south of 58° N. latitude and west of 173° W. was deleted.
- Desire to avoid gear conflict and incidental catch is not balanced against the ability to harvest the TALFF north of 58. TALFF 13 7,500 mt. The survey indicates that only 1,815 mt of opilio is available north of 58 N. The amendment indicates approximately 3,500 mt.

#### Other considerations.

- The draft regulations and accompanying preamble are not adequate.
- The introduction to the amendment simply summarizes actions to be taken with no discussion of mast for amendment, what the action will accomplish, etc.
- The formula for TALFF is incorrectly stated in several places as TALFF = OY DAH JVP instead of TALFF = OY DAH.
- The definition of JVP (amendment p. 2) is misleading and inaccurate. It should read JVP = DAH DAP.
- The economic discussion of P. 13 of the amendment is misleading and unnecessary in a fishery purportedly regulated on the basis of an OY which equals ABC.
- In Table A, and Table F5, of the amendment, neglected to include the exploitation rate in the calculation of MSY for opilio.
- The draft regulations and accompanying preamble are not adequate.



# Tentative Schedule for Tanner Crab Amendment No. 5

Jaquary il Memo rapifaxed, outlining areas of concern January 14 January 31 Conference call Druft regulatory impact analysis received; 15 day con February 15 Froposed regulations, presaple, etc prepared. Minor corrections to amendment text propared. February 16 Approval memo signed February 19 Draft amendment, proposed regulations filed at FR 60 day comment period February 19 - April 21 Feb-March Final regulatory analysis, final FR notice, regs, etc. in preparation. April 21 60 day comment period ends. Response to comments. April 28 Publication of final amendment, final regs. Cooling off period?