

M E M O R A N D U M

TO: Council, SSC and AP Members

FROM: Jim H. Branson
Executive Director

DATE: December 29, 1981

SUBJECT: Contract Approvals

ACTION REQUIRED

1. *Final approval of Contract 80-4 with ADF&G on the enhancement of their catch data reporting system.*
2. *Approval of funding for King and Tanner Crab Observer Program.*
3. *Approval of funding for a meeting in Seattle of the Crab Observer "Fishermen's Conference."*

BACKGROUND

1. Contract 80-4, To Expand and Enhance the Domestic Commercial Fisheries Catch Data Reporting System Off Alaska, with ADF&G for \$145,300, is up for final approval. The SSC has reviewed the contract's final report and will make its recommendation at this meeting. A demonstration of ADF&G's data reporting system has been scheduled for Monday around 5 p.m. or when the Council recesses. If more than 15 people want to attend, a second demonstration will be scheduled for later in the week. Given final Council approval, this contract will be complete and outstanding invoices can be paid.
2. Item F-1(a) is a report by the Crab Observer Committee which presents four different levels of activity and funding for the King and Tanner Crab Observer Program (see p. 4 of attachment 1 to the Report). The Council needs to decide if the program should be supported and, if so, the level of support.
3. The Council is requested to approve funding for a meeting in Seattle on January 19 of the Crab Observer "Fishermen's Conference."

Funding will cover travel expenses only and is estimated to not exceed \$4,000.

CRAB OBSERVER COMMITTEE
Logistic Subgroup Report

The Logistic Subgroup met in Seattle on October 29, 1981. The purpose of the meeting was to identify the problems in organizing an observer program for the crab fishing fleet. The following were participants at the meeting:

Steve Davis, North Pacific Fishery Management Council
Bart Eaton, Fisherman, Council Member NPFMC
Dick Goldsmith, North Pacific Fishing Vessel Owners Assn.
Dick Pace, Universal Seafoods
Dennis Peterson, Fisherman
Bob Resoff, Alaska Crab Institute
Judy Willoughby, North Pacific Fishery Management Council
Bill Woods, Pan-Alaska Seafoods

Following introductions, the meeting began with a review of the following events which led to the idea of a crab observer program:

1. Results of 1981 NMFS Bering Sea Trawl Survey indicate a more severe decline in king and Tanner crab stocks than was earlier predicted.
2. The initial fishing community's response to the survey was not to believe the results and to question the validity of the survey (this response occurred prior to the opening of king crab fishing season).

3. The fishing community proposed a crab observer program to collect in-season crab data and a possible means to either support or refute the summer trawl surveys.
4. September 10, 1981 king crab season opened. It was soon apparent that the king crab harvest would conform to that predicted by the 1981 survey. King crab catches were very low with similar harvest expected with Tanner crab.
5. A renewed interest in a crab observer program to help compliment the summer trawl surveys and to fill deficiencies in the data base.

The Subgroup then discussed the objectives of the observer program. Although this is the task assigned to the Scientific Subgroup, we agreed on two general objectives: (1) To provide crab data not currently available by trawl surveys. We recognized that from fish tickets and dockside surveys, there exist in-season data on the crab being brought to port. What is lacking is data on crabs being discarded at sea (i.e. sex and size distribution, condition of discarded crab, and composition of catch). There is also a need for similar data from catcher/processor vessels. And, (2) The results from the program could be used as a means to provide better procedures for handling non-legal crabs. It was emphasized that the observers were not enforcement officers and that the collected data would not be used by enforcement agencies. The placement of observers on fishing vessels would be on a voluntary basis.

The question arose on the number of vessels that might be available to participate in the program beginning with the Tanner crab season

(February 15, 1982). Although actual names of vessels were not provided, the representatives of the fishing industry felt that there would be more vessels available than observers. That led to the question of how many observers were needed for the program. NMFS currently strives for 20% fleet coverage in its observer programs. Using the same figure, that would require coverage on 40 boats in order to provide statistically viable data for the fleet as a whole. An estimated cost of supporting an observer program for both king crab and Tanner crab fisheries would be approximately \$550,000 (see Attachment 1). However, fewer observers would be needed if the program were designed as a pilot project. Recruiting observers appeared to be a potential problem. The NMFS foreign observer program, utilizes fishery students recruited through the University of Washington. Fishery students make excellent observers since they are familiar with the science and train easily. They are also easily obtainable and less expensive than professional biologists. Since crab fishing occurs primarily during the Fall through Spring months, and due to the hostile weather common in Alaska waters during this period, recruitment of students may be difficult. A list of problems facing the development of an observer program was prepared and is provided as Attachment 2. Each problem will need to be addressed.

Some members of the subgroup felt that the data collected by observers would not be useful due to the many variables in the actual fishing by individual vessels. They thought that fishermen might fish differently, handle crab differently, fish slower, etc., with an observer on board than without one.

With the high costs involved, and the uncertainty of fishermen influencing the data collected, the idea of expanding the present State of Alaska dockside

survey was discussed. Re-modeling the interview form to provide more quantitative data might achieve many of the same objectives as an observer program. However, catcher/processor data would not be obtained with this alternative. The Subgroup suggests that if this alternative proves viable, the interviewer should be knowledgeable with the fishery and become a long-time participant in the program. Ideally, these interviewers would also be involved in the analysis and reporting of the data. It was felt that these interviewers would become familiar to the skippers of the fishing vessels who in turn would be more inclined to spend time with the interviewer. In addition, if the skippers were provided with a list of the kind of questions to be asked by the interviewer prior to their leaving for the grounds, the data supplied by the skipper would probably be more quantitative and accurate.

If the Council determines that an observer program is needed, then efforts should be made to begin a pilot program with the Tanner crab season.

(Attachment 1: ESTIMATED BUDGET)

(Attachment 2: LOGISTIC PROBLEMS)

BERING SEA SHIPBOARD OBSERVER PROGRAM

Line Item Allocation

<u>100 Permanent</u>	<u>100 Seasonal</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>Total</u>
45.8	350.0	123.0	10.5	14.9	0	544.2

General Description

In 1981 one hundred sixty-nine fishing vessels and eleven catcher/processors harvested Tanner crab in the Bering Sea from January through July. Currently, 212 fishing vessels and 11 catcher/processors are fishing for king crab in Area "Q" and "T" (Bering Sea). The Department of Fish and Game monitors the catch of crab utilizing dockside samplers who interview approximately 60 to 70 percent of the vessels. The current program has two weak points, which are that no samples are collected from catcher/processors and no biological information can be collected on sublegal crab or female crab from the vessels contacted at processor's docks.

A shipboard observer program would increase knowledge of fishing performance and especially it would insure catcher/processors adhered to regulations and reported their catches accurately.

The program would be quite expensive to operate depending on coverage of the existing fleet. The area is remote and commercial transportation and housing facilities would have to be utilized. Individuals would be trained and assigned vessels at Dutch Harbor. Individuals would be expected to stay aboard the vessel during its participation in the fishery.

Major Objectives

1. Collect data on sublegal and female crab.
 - a. Lengths
 - b. Weights
 - c. Shell condition
 - d. Number, etc.
2. Monitor catches and report same when placed aboard catcher/processors.

3. Keep accurate log of fishing procedures - sorting CPUE, Area and depth fished.

100 Personal Services

1. Permanent Personnel - Fishery Biologist II
 - a. Stationed at Dutch Harbor training officer and co-ordinator for observer program (new position) \$ 45,818

100 Personal Services

1. Tanner crab (February 15 - July 15).
 - a. *F.B.I - 14A - 5 man months @ 2,846 14,230
 - 18 F.B.I - 90 man months @ 2,846 256,140
 2. King crab (September 15 - November 1)
 - a. **F.B.I - 14A - 1.5 man months @ 2.846 4,269
 - 22 F.B.I - 33 man months @ 2,846 93,918
- Total \$350,058

200 Travel and Per Diem

Air transportation from Kodiak to Dutch Harbor and return to Kodiak for forty observers during the two fisheries.

<u>Personnel</u>	<u>Travel</u>	<u>Per Diem</u>	<u>Location</u>	<u>Costs</u>
(1) F.B.I	846.00	4 days @ 76.00 - 296.00	Kodiak/Dutch	\$ 1,142
(40) F.B.I				45,680

Board and room aboard vessels:

King crab fishery

1. 45 days @ 21/day 945
 - a. 22 F.B.I x 945 20,790

Tanner crab fishery

1. 150 days @ 21/day 3,150
 - a. 18 F.B.I x 3,150 56,700

Total \$123,000

* 10 percent coverage - 180 vessels - 18 positions.
 ** 10 percent coverage - 223 vessels - 22 positions.

300 Contracts

1. Communications	
a. Telephone	\$ 2,000
b. Telegram	500
c. Xerox	2,000
2. Aircraft Charter	
a. 10 hrs. twin engine @ 400/hr.	4,000
b. 10 hrs. single engine @ 200/hr.	<u>2,000</u>
	Total \$ 10,500

400 Commodities

1. Survival suits @ 250 each x 22	\$ 10,000
2. 22 calipers @ 100 each	2,200
3. 22 pairs rain gear @ 100 each	2,200
4. Misc. supplies	<u>5,000</u>
	Total \$ 14,400

500 Equipment

Total proposed budget for observer program covering the King and Tanner crab fishery = \$544,446 (10% coverage of fleet)

Total proposed budget for just:

King crab (10% coverage) = \$203,300

Tanner crab (10% coverage) = \$395,864

Tanner crab pilot project (6 observers only) = \$102,927

Assumes project will be continued through the entire fishing season (i.e. 5 months).

King crab pilot project (6 observers only) = \$43,161

Assumes project will be continued through the entire fishing season (i.e. 1.5 months).

ESTIMATED BUDGET FOR CRAB OBSERVER PROGRAM

King Crab Season Only

\$139,736	Salaries (22 observers plus 1 F.B.II)
25,124	Travel and Per diem
70,790	Room and Board on Vessels
5,250	Communications and Aircraft Charter
<u>12,400</u>	Commodities
\$203,300	

Tanner Crab Season Only

\$301,958	Salaries (18 observers and 1 F.B.II)
20,556	Travel and Per diem
56,700	Room and Board on Vessels
5,250	Communications and Aircraft Charter
<u>11,400</u>	Commodities
\$395,864	

Tanner Crab Pilot Project (6 observers) assuming 5 months

\$ 85,380	Salaries
6,852	Travel and Per diem
5,670	Room and Board on Vessels
1,575	Communications
<u>3,450</u>	Commodities
\$102,927	

King Crab Pilot Project (6 observers) assuming 1.5 months

\$ 25,614	Salaries
6,852	Travel and Per diem
5,670	Room and Board on Vessels
1,575	Contracts
<u>3,450</u>	Commodities
\$ 43,161	

CRAB OBSERVER PROGRAM

Logistical Problems

Transportation of observers

- to and from place of hire to Dutch Harbor

Lodging of observers while in port (usually prior to going on board or waiting for flight out).

Food while in port

Equipment -

- survival suits
- special clothing, gloves, boots, etc.
- measuring equipment (maybe already available from NMFS)

Salaries of observers

Insurance of observers

Onboard Ship

- Bunk space
- Deck space
- Food
- Duration of trips

Special training of observers

Data needs

Analysis of data - who will do it. Probably NMFS

Publication results