

M E M O R A N D U M

TO: Council, SSC, and AP Members

FROM: Jim H. Branson *JHB*
Executive Director

DATE: May 10, 1982

SUBJECT: Contracts and RFPs

ACTION REQUIRED

Final approval of Contracts 81-2 and 81-4. Approval of Contractor for Halibut limited entry study.

BACKGROUND

Current Council contracts are listed below with contract information on the contractor, funding amount, percent expended to date, duration, objective, and status. Those contracts requiring Council action at this meeting are indicated with an asterisk.

Current Council Contracts

*81-2: Processing of Fisheries Data
(ADF&G and CFEC, \$55,000, 57%, October 1, 1980 to April 30, 1982)

Objective: To enhance capabilities of ADF&G and CFEC to provide harvest and processor data for 1977-79 to the Council.

Status: At the request of the contractor, the contract was extended to April 30, 1982. The final report has been received and distributed to the SSC review group. Given SSC approval, the Council may give final approval of this contract.

*81-4: Marine Mammal Feeding Habits
(ADF&G, \$45,000, 101%, July 13, 1981 to May 31, 1982)

Objective: To establish a baseline of current knowledge on marine mammals feeding habits and food requirements in the Bering Sea, evaluate its adequacy for use in ecosystems models, and indicate a general plan for further research.

Status: The contract was extended to May 31, 1982. The draft final report has been received [the Executive Summary is included here as E-1(a)] and distributed to the appropriate review groups for evaluation. Given approval by the SSC and the marine mammal workgroup, the Council may give final approval at this meeting.

81-5: Incidental Salmon Catch Study

(FRI/UW, \$56,840, 52%, October 1, 1981 to September 30, 1982)

Objective: To determine the feasibility of using scale analysis to identify the stream or area of origin of chinook salmon caught incidentally in the foreign trawl fisheries off Alaska.

Status: The second quarterly report for January - March 1982 was received and distributed to the appropriate SSC workgroup for review.

Halibut Limited Entry RFP

The subject RFP was circulated and bids were due May 14, 1982. A proposal review group will meet on Monday, May 17th and their recommendations should be available for Council review.

1.0 TITLE PAGE

DRAFT FINAL REPORT

TO: North Pacific Fishery Management Council
P.O. Box 3136 DT
Anchorage, Alaska 99510

CONTRACT NO.: 81-4

TITLE: FEEDING HABITS, FOOD REQUIREMENTS, AND STATUS OF BERING SEA
MARINE MAMMALS

PRINCIPAL INVESTIGATORS: Lloyd F. Lowry¹, Kathryn J. Frost¹, Donald
G. Calkins², Gordon L. Swartzman³, and
Susan Hills¹

1 April 1982

¹ Alaska Department of Fish and Game, 1300 College Road, Fairbanks,
Alaska 99701

² Alaska Department of Fish and Game, 333 Raspberry Road, Anchorage
Alaska 99502

³ University of Washington, Center for Quantitative Science, Seattle,
Washington 98195

3.0 EXECUTIVE SUMMARY

This report is a compilation, summary, and evaluation of available data on feeding habits, food requirements, and status of Bering Sea marine mammals. Included are an annotated bibliography, a research plan designed to fill major data gaps, and a discussion of the utility of data for assessing interactions among marine mammals and commercial fisheries in the Bering Sea/Aleutian Islands region. Considered in the report are 26 species of marine mammals, including eight species of baleen whales, eight toothed whales, eight pinnipeds, and two carnivores.

Although for most species it is possible to generally describe the foods eaten in the Bering Sea, with the exception of the northern fur seal, data are not adequate for determining the quantitative composition of the diet. Estimates of food requirements generated by one of several methods are also usually available but are of unknown reliability in most instances. Measurements of indicators of population status are accompanied by natural and sampling variability, the magnitude of which is often large or unknown.

Although there can be no question that some marine mammals compete with commercial fisheries, there is no conclusive evidence to show how marine mammals may affect and be affected by fisheries in the Bering Sea. A variety of techniques can be used for assessing interactions among marine mammals and commercial fisheries. ^{of quantities of fishes consumed by marine mammals} Estimates are useful for comparison with fishery harvests and are required as inputs for the NMFS Bering Sea ecosystem model DYNUMES/PROBUB. However, such estimates are not presently reliable due to the usual lack of necessary data and

possible variability associated with available information. Attempts to correlate changes in marine mammal population status with activities of fisheries have not to date been successful. Correlations of this type are unlikely to be conclusive due to the difficulty of obtaining needed information with adequate accuracy. Ecosystem models and simulations, while appealing since they could allow predictions of interactions and effects, are not yet adequately developed and tested. Available data are adequate to produce a conceptual assessment of the likelihood of significant interactions with present and potential fisheries based on general considerations of feeding habits and population status of marine mammals. This assessment produced the following categories: high probability of interaction--northern fur seal, Steller sea lion, harbor seal, spotted seal, belukha, harbor porpoise, and sea otter; moderate probability of interaction--gray whale, walrus, Dall's porpoise, ribbon seal, and bearded seal; and low probability of interaction--killer whale, minke whale, beaked whales, polar bear, fin whale, blue whale, sei whale, humpback whale, bowhead whale, right whale, and sperm whale.

The research plan developed dealt only with eight species that feed primarily on fishes and for which the probability of interaction with fisheries was considered moderate or high: fur seal, sea lion, harbor seal, spotted seal, ribbon seal, belukha, harbor porpoise, and Dall's porpoise. Those species may interact significantly with existing fisheries for groundfish, herring, and salmon and potential fisheries for capelin, saffron cod, and shrimps. Areas where the most significant interactions may occur are offshore and coastal regions of the southern

Bering Sea and coastal regions of the northern Bering Sea. Data on distribution and abundance in relation to fishery resources, prey consumption in relation to availability, condition indices, and vital parameters should, to the extent practical, be collected for each species in each area. Applicable techniques include aerial and shipboard surveys, examination of specimens from opportunistic and systematic collections, and marking and telemetry of animals. Suggestions are made for coordination and planning of efforts dealing with modeling and ecosystem simulations.

FINANCE COMMITTEE MINUTES

May 19, 1982

The Finance Committee met on May 19, 1982 with the following people in attendance:

Jim Campbell
Peter Busick
Harold Lokken
Don Collinsworth
John Harville
Gene DiDonato
Jim Branson
Clarence Pautzke
Judy Willoughby

Robert McVay

Bill Smart and Mike Hoskins from Price Waterhouse, Inc. presented the results of the audit of C.A. 79-ABH-0035, a programmatic grant for 54,604 and C.A. 81-ABH-2, the FY81 administrative grant for \$925,849. In addition to financial audits, they also audit and recommend management changes to improve internal control and administrative efficiency. In recommending acceptance of the audit report the committee found no deficiencies of any substance and complimented the staff for the resulting conclusions. Copies of the audit report are available for Council members upon request.

The staff then briefed the committee on the status of FY82 administrative funds, and it is projected expenditures for this grant will be within the current funding level of \$923,000.

Donald Rosenberg reviewed the SSC's recommendation of FY83 programmatic funding request. The Finance Committee recommends approval of the following projects, and they are not listed in order of priority:

	<u>Amount</u>	<u>Total</u>
Rapid Response	80,000	
FMP Development ADF&G	60,000	140,000
Sablefish Symposium	4,000	144,000
Domestic Trawl Logbook Program-1 year	167,300	211,300
Feasibility of Using Scale Analysis to Identify Bering Sea Herring Stocks	60,000	271,300
High Seas Tagging of Salmon	60,000	331,300
Golden King Crab Study	20,000	351,300

Also, upon recommendation of the SSC, the Finance Committee recommends the following action on contracts:

Approve for final payment Contract 81-2, ADF&G Fisheries Data, for up to \$23,691.80 upon receipt of billing.

Recommends delegation of authority for final approval of contract 81-4, Marine Mammals, to the SSC Marine Mammal subgroup.

Clarence Pautzke reviewed the four proposals the Council received for the study of Halibut Hook and Line Limited Entry. The Finance Committee recommends awarding this contract to Northwest Resources Analysis for \$73,000.