


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke   
Executive Director

DATE: April 15, 1998

SUBJECT: Social and Economic Data Collection

ESTIMATED TIME  
1 HOUR

**ACTION REQUIRED**

- (a) NMFS initiative on cost data: status report.
- (b) Socioeconomic data committee report.
- (c) Proposed plan amendment for data collection: discussion and direction.

**BACKGROUND**

Last June the Council passed a motion to establish a committee to identify socioeconomic data needs and propose a process to gather and report it routinely. In September a motion was passed to send a letter to the Assistant Administrator for Fisheries, Rollie Schmitten, urging support for the Alaska Fisheries Science Center's initiative to collect cost data from industry. Then in February, the Council passed a motion to initiate an amendment calling for collection of socioeconomic data such as cost and price information. The goal of these efforts is to build a database that we can draw on to perform more quantitative cost-benefit analyses, rather than always coming up short on data when we need to analyze very contentious allocational issues such as I/O3.

At this meeting NMFS will report on their cost data initiative. Then we will have a report from the first meeting of the Socioeconomic Data Committee, which will hold its first organizational meeting this week. Finally, we will attempt to lay out a game plan for developing an amendment on data collection, though work on it likely will not commence until inshore-offshore 3 is completed.

More materials will be available on this issue at the Council meeting. An excerpt from our research priorities list from February 1998 is under item C-6(a). It lays out in detail the types of economic and social data sought by the SSC.

**Excerpted from February 1998 Research Priorities identified by the North Pacific Fishery Management Council and its Scientific and Statistical Committee.**

There is a critical need for the development and continued maintenance of basic social and economic information databases on the fisheries and fisheries dependent communities of GOA and BS/AI. This information is required for establishing a baseline to be used in the evaluation of the impacts of alternative management measures.

1. There is a need to develop cross section-time series of data on:
  - a) Exvessel and wholesale prices (information is needed on actual transactions and sources of variability).
  - b) Inventories and exports (greater detail on product form, volume, and transactions prices).
  - c) Cost of variable inputs to fishing
  - d) patterns of ownership in fishing and processing operations (concentration, vertical integration, foreign participation).
  - e) employment and earnings for crew and skippers
  - f) patterns of employment/unemployment, earnings, transfer payments in fishery dependent communities, and
  - g) the location where goods and services are purchased.
  
2. There is a need for economic analyses of:
  - a) the demand for fisheries products (exvessel, wholesale, international, and retail markets)
  - b) production functions for catch and processing
  - c) regional models of economic activity in fishery dependent communities,
  - d) an assessment of the cumulative efficiency and equity consequences of management actions that apply time/area closures
  - e) an assessment of the consequences of the halibut/sablefish IFQ program (changes in product markets, characteristics of quota share markets, changes in distribution of ownership, changes in crew compensation, etc.)
  - f) estimates of the net economic benefits of recreation and subsistence harvests, and,
  - g) and improved representation of fleet behavioral response to alternative fishing opportunities to provide better prediction of how fishing effort will shift in response to time/area closures.

3. Research pertinent to assessment of the social impacts of actions contemplated by the Council include:

- a) **Fishery/Community Linkages:** Field research aimed at capturing the full array of linkages between fisheries and social and economic life in fishery dependent communities.
- b) **Social Assessments:** Selected community and industry assessments should be conducted to establish baseline conditions underlying social problems identified by the Council and the Advisory Panel. As appropriate, these projects can be extended to generate time series information.
- c) **Social Impacts:** Social impact and policy research should be conducted regarding the identification and potential effects of alternative management actions.
- d) **Develop better methods for determining the social costs and benefits of management actions (e.g. through the use of non-market valuation techniques).**

**Socioeconomic Data Committee**

**Industry**      Chris Blackburn  
                         John Gauvin  
                         John Iani  
                         Ed Richardson

**Alaska**          Seth Macinko

**NMFS**            Rich Marasco

**Council**        Dennis Austin

**SSC**             Keith Criddle

**Staff**            Darrell Brannan

Agenda Item C-6 (a)  
April 20, 1998

**STATUS REPORT:  
NMFS INITIATIVE TO COLLECT COST, EARNINGS AND EMPLOYMENT DATA AND  
DEVELOP MODELS TO MEASURE THE ECONOMIC PERFORMANCE OF  
THE ALASKA GROUND FISH AND HALIBUT FISHERIES**

The Alaska Fisheries Science Center has initiated this program with support from the NMFS Office of Science and Technology. That support has funded a cooperative agreement with Pacific States Marine Fisheries Commission (PSMFC) through which much of the work associated with the program will be accomplished.

Objective

The objective of the program is to improve substantially the data and models which will be available to support economic analyses of the Alaska fisheries under Federal jurisdiction.

This will be done by projects that will do the following:

- a. Initiate an ongoing economic data collection program for the Alaska groundfish and halibut fisheries.
- b. Initiate an ongoing program to improve the usefulness of existing data collection programs in supporting economic analyses.
- c. Initiate an ongoing program to develop models and techniques to monitor and evaluate economic performance in the Alaska groundfish and halibut fisheries.

Initially the projects will be designed to provide data and models that will support monitoring the economic performance of these fisheries and various components of these fisheries through primary processing. However, this will be done with the objective of subsequently also supporting the following:

- a. Analyses of the economic performance effects of current management measures; and
- b. Analyses of the economic performance effects of alternative management measures.

During 1998, the project will focus on collecting economic data for the participants in the BSAI pollock fishery and the H&G factory trawler fleet.

The data collection and modeling program is designed to provide data and economic models which will support several different

types of economic analyses (e.g., cost-benefit and regional economic impact analyses). The development of these critical building blocks for economic analyses will take time and, although it is beginning with a large step, it will not immediately provide all the information that would be useful in evaluating any specific management action. For example, initially the focus will be on measuring past economic performance through primary processing as opposed to projecting future performance through primary processing and beyond. The immediate objective is to begin successfully an ongoing program for improving the economic information that will be available. That objective cannot be met by a program that focuses on the information requirements of one or a small number of management actions that are currently being considered.

Potential measures of economic performance for a fishery and for distinct components of a fishery include the following:

- a. contribution to net National benefit;
- b. contribution to income of groups of participants in the fisheries (i.e., fishermen, vessel owners, processing plant employees, and processing plant owners);
- c. employment;
- d. regional economic impact (income and employment); and
- e. factor utilization rates.

### Specific Projects

1. Costs, earnings and employment survey Much of the early work for this survey is being done jointly with the Pacific Coast data collection project. A Federal Register Notice for the Pacific Coast and Alaska economic data collection program was published March 11. That started the 60-day public review period. NMFS and PSMFC staff, in conjunction with Council economists and industry, will prepare a list of questions for OMB to review. Each questionnaire that will be developed to collect cost, earnings and employment data for Pacific Coast and Alaska fisheries during the next three years under the program described in the FR Notice will contain a subset of the questions on the list approved by OMB. The list will be submitted for OMB review at the end of the public comment period. Center staff will use the list of questions to prepare draft questionnaires for select participants in Alaska groundfish fisheries. The questionnaires will be submitted to PSMFC by late May and the review of the drafts will be completed by PSMFC and the OSU Research Center within 20 days.

2. Data from bookkeeping and accounting firms Very preliminary efforts have been made to determine the feasibility of obtaining cost, earnings and employment data from bookkeeping and accounting firms as well as market value data from vessel brokers and property assessors. This spring, Center and PSMFC staff will contact vessel owners and bookkeeping and accounting firms to determine their ability and willingness to provide data. If it appears to be feasible, Center staff will specify the data to be provided and obtain the permission of vessel owners for their bookkeeping and accounting firms to provide that data by late May. By late June, PSMFC will contract with the bookkeeping and accounting firms to provide the specified data.

3. Improve existing data collection programs PSMFC staff have begun projects to: 1) quantify the magnitude of the discrepancies between the NMFS blend and weekly processor reports and recommend methods for decreasing such discrepancies; 2) review the Alaska Commercial Operators Annual Report in terms of its use and usefulness in providing timely and accurate price data and explore alternative sources of product price data; and 3) determine the feasibility of using alternative sources (e.g., fish tickets) for employment and effort data. An AKFIN meeting in Juneau to discuss common data problems and solutions contributed to these projects. The new PSMFC analyst who will assist in completing these projects began work April 20.

4. Development of models and techniques to monitor economic performance An organizational meeting was held in September. PSMFC completed the sub-contract and the hiring activities and University of California, Davis researchers began work on this project in January. The tasks to be completed under this project are as follows:

- a. Develop indices of economic performance;
- b. Develop economic performance models to generate estimates for a fishery and sub-components of a fishery;
- c. Provide estimates of economic performance for a fishery and sub-components of a fishery;
- d. Evaluate the indices, models, estimates, and the data on which they are based; and
- e. Provide recommendations for improving the indices, models, estimates, and the data on which they are based.

The development of the survey instrument, the determination of the extent to which economic data can be obtained efficiently from third parties (e.g., bookkeepers) with the permission of

vessel owners, and the development of the estimates of economic performance are highly interdependent activities. Therefore, the survey instrument will be developed through an iterative and cooperative process among Center economists, those developing the measures of economic performance, and those who will provide the data. The survey instrument will be pre-tested, non-response bias will be evaluated, and the effectiveness of the survey will be assessed. That assessment is a critical step in improving the survey instruments that will be used in the future.

### Staffing

Progress on the first two projects has been slower than expected for a variety of reasons. It is taking longer than expected to fill two AKC economist positions, previous commitments for AKC economists have taken longer than expected to meet, and the ability to avoid new commitments has been less than expected. The Center is in the process of hiring the economist(s) who will work exclusively on improving the economic data and models that will be available to support economic analyses of the Alaska fisheries under Federal jurisdiction. The new economists are expected to be selected soon and to begin work in June.

### Future Projects

A proposal to obtain additional funding for Pacific Coast and Alaska cost, earnings and employment data collection was submitted to the NMFS Office of Science and Technology in late March. The proposal, which is expected to be approved, consists of the following four projects:

- a. Pacific Coast groundfish processors cost, earning, expenditure and employment survey;
- b. unit input price collection for the Pacific Coast and Alaska;
- c. support for increased AKC staff for the 1998 cost, earning and employment data collection effort; and
- d. cost, earnings and employment data collection for the Pacific Coast and Alaska fixed gear groundfish fisheries for 1999.

The current proposal is for FY 98. A proposal for FY 99 will be prepared to ensure that the last project is fully funded.

### Coordination with Council Amendment Process



The development of new data collection programs and the improvement of existing programs can be assisted with a plan amendment for data collection. Although some of the elements of such an amendment may be identified readily others will take more time to develop. This is in part because the development of the amendment, the determination of the extent to which economic data can be obtained efficiently without an amendment, and the development of the estimates of economic performance are highly interdependent activities. Therefore, coordination between the NMFS initiative discussed above and the amendment is essential.

Examples of the easier to identify elements of the amendment may include the following: 1) requiring all processors to provide annual data on product prices; 2) requiring ex-vessel prices to be entered on fish tickets; and 3) requiring information on post-landing price adjustments.

## **Draft Agenda**

**Socioeconomic Data Committee  
Organizational Meeting  
Wednesday Night, 7 p.m.  
April 22, 1998  
Suite 1420**

1. Introductions
2. Purpose of Committee
3. NMFS report on data initiatives
4. Review Council motion on data collection
5. Review data priorities
6. Recommended next steps and schedule
7. Adjourn

### **Council Motion (June 1997):**

“Establish a Social and Economic Data Committee consisting of 8 representatives (2 industry, 2 state, 2 federal, 1 Council member, and 1 Council staff). The committee will identify the basic social/economic information which should be collected on a routine basis to develop a more comprehensive database for use by the Council and propose a process by which this information will be routinely gathered and reported. The committee will look at new data collection initiatives, including the cost data gathering initiative begun by NMFS, the newly formed AKFIN, and provisions of the Magnuson-Stevens Act. If the committee feels that reasonable data collection initiatives are unduly constrained, they should indicate their concerns. The committee will report to the Council at its February 1998 meeting, and unless additional meetings are deemed necessary would be disbanded after making its report.”

### **Council Motion (February 1998):**

“Follow up on the SSC’s recommendation to initiate an amendment to institute mandatory reporting of prices along with catch data and the collection of economic data on costs from the industry.”

**Socioeconomic Data Committee**

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                         John Gauvin  
                         John Iani  
                         Ed Richardson

**Alaska**         Seth Macinko

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