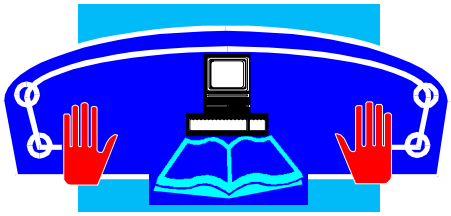

A Study Of Market Alternatives For The Great Slave Lake Fishery Fisheries, Fish Marketing In The Nwt

Date of Report: 1989

Author: Rmc Resource Mgmt Consultants

Catalogue Number: 3-22-5

FISHERIES

3-22-5

Stevenson Kellogg Ernst & Whinn

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Stevenson Kellogg Ernst & Whinney

Management Consultants

Proposed Consulting Program

EVALUATION OF FRESHWATER FISH PROCESSING AND MARKETING OPPORTUNITIES FOR GREAT SLAVE LAKE FISHERY

Prepared for

Town of Hay River
P.O. Box 1306
Hay River, N.W.T.
XOE ORO

Attn: Mr. Austin French
Economic Development Planner

Submitted by

John G. Fraser
Partner

Vancouver, September 9, 1986
Cs

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I

INTRODUCTION

The processing, marketing and distribution of freshwater fish in Canada is undertaken by the Freshwater Fish Marketing Corporations (FFMC), a federal body located in Winnipeg. The NWT Fishermen' Federation is concerned about the constraints placed upon the Great Slave Lake freshwater fishery because of having to deal through the FFMC.

As a result, you are commissioning an independent study to identify and to evaluate marketing and processing options available to the Great Slave Lake fishery.

Stevenson Kellogg Ernst & Whinney is one of the firms asked to propose on this assignment. We 'feel well qualified to work with you on this project. The project team assigned to this study has worked in the freshwater fish industry in Canada. Our first assignment was undertaken in 1978 as Thorne Ridden Associates. The author of this proposal was responsible for the market research conducted for that study. We have since conducted marketing studies for the Arctic char fishery in the Northwest Territories and for the freshwater fish industry in Alberta. Most recently, we undertook an examination of fish freighting options on Great Slave Lake for the Government of Northwest Territories.

In the process of conducting these studies, we have interviewed processors, brokers, wholesalers and distributors of freshwater and saltwater fish in North America and to a lesser extent in Europe. We have also worked with fishermen in some of the above studies and have acquired a good understanding of their issues and concerns.

In preparing this proposal, we have relied upon a number of sources:

- Terms of Reference and background material supplied by Mr. Austin French, Economic Development Planner for the Town of Hay River.
- A visit to Hay River and discussions there with Mr. Don Stewart, President of the NWT Fishermen' Federation, Mr. Chuck Davidge, a local businessman and Mr. Austin French.
- A review of the several relevant projects conducted by our firm including the 1978 Marketing and Strategic Planning Review for the FFMC.

in the chapter which follow, we discuss our understanding of your requirements, our general approach, proposed work plan, staffing, timing and costs, as well as our firm's qualifications to assist you in this project.

II

OUR UNDERSTANDING OF YOUR REQUIREMENTS

A. THE GREAT SLAVE LAKE FISHERY HAS DECLINED MARKEDLY

As indicated in your background material, the Great Slave Lake fishery used to be a major force in the local economy. However, after the Second World War, production declined from 7-8 million pounds, down to 5 million pounds for several years. The most recent complete year (1984/85) for which the Department of Fisheries and Oceans (DFO) has statistics, show total production from the lake to be 2.9 million pounds. The bulk of the production is export grade whitefish (approximately 2 million pounds) and the balance, northern pike, lake trout, inconnu and some pickerel.

Corresponding to the decline and in part accounting for the decline has been a decrease in the price paid to fishermen. The background material provided shows the total price paid to fishermen for medium sized export whitefish declining from 52¢ per pound in 1979/80 to 37¢ per pound in 1983/84.

According to this analysis and to DFO sources, availability of the resource has never been a problem. Production quotas have never been exceeded. Thus, the fishermen are not facing a declining or deteriorating resource. If anything, the quality of the fishery may be increasing. Cyst-infested fish are almost unknown on the lake.

The resource exists both in quantity and quality.

B. THE REGIONAL ECONOMY IS SUFFERING

The announced closure of Cominco's Pine Point Mine in June of 1987, and the cessation of exploration in the Beaufort sea by Gulf constitute severe blows to the local economy. Hay River is the centre of a transportation hub for the region. The two transportation companies, ATL and NTCL, are reducing the numbers of vessels in action on the MacKenzie River and in all likelihood will be reducing staff complements.

The Town of Hay River is taking an aggressive approach to do what they can to offset the effect of the above events.

The Great Slave Lake fishery is one such opportunity. The origins of Hay River were based on that fishery. Having gone full circle, that same fishery now has an opportunity to play a significant part again in the local economy.

increased production and a processing facility will create jobs and incomes for the Hay River community.

C. FISHING IS A WAY OF LIFE FOR THE GREAT SLAVE FISHERMEN

For the Native fishermen who constitute a good proportion of the Great Slave Lake fleet and indeed for most fishermen, fishing is a way of life. That way of life supports a very marginal and often subsidized standard of living.

You wish to make that "way of life" a more businesslike proposition. You want to do that by linking a traditional resource, strengthandway of life with modern marketing techniques and distribution practices. In this way, standards of living can be improved through self-help rather than through increasing subsidies and welfare payments.

D. A LACK OF TRUST HAS DEVELOPED BETWEEN THE FEDERATION AND THE FFMC

You are concerned that the FFMC is not serving well the Great Slave Lake fishermen. You believe that the costs added on by the FF MC to the price paid to the fishermen are excessive. You feel that the marketing effort has lacked imagination and that it has not exploited the strength of the Great Slave Lake resource. You feel that the distribution methods used prevent the end user from realizing the quality of the Great Slave Lake resource.

However, you are not commissioning a study to investigate the shortcomings of the FFMC but to explore the potential of alternative marketing and distribution arrangements. Thus, the FFMC should be regarded as the base case in this study. We will be looking for incremental benefits over and above that base case.

E. YOU REQUIRE AN INDEPENDENT ASSESSMENT OF ALTERNATIVE MARKETING ARRANGEMENTS

Direct discussions between fishermen and buyers lead you to believe that the potential exists in the marketplace to increase the production and the return to the fishermen if the FFMC could be bypassed.

Your objective for the study is first to identify and assess market opportunities for the Great Slave Lake production. Secondly, you wish to know

whether or not those market opportunities can justify a processing infrastructure and an increased return to the fishermen.

F. YOU WISH TO PARTICIPATE IN THE PROCESS

Both the Federation and the Economic Development Planner will be directly involved in the study. Your objective is to ensure first that the consultants have complete information, particularly with respect to the supply side but also with respect to sources of information in the marketplace.

Secondly, if the outcome of the study does involve a shift away from the FFMC, you will regard the study as the first step in the process. Those involved in later stages of processing and marketing should participate now during this feasibility stage.

G. YOUR CONSULTANTS SHOULD HAVE IMAGINATION AND EXPERIENCE IN THE INDUSTRY

We are familiar with the freshwater fish industry in Canada. We have met the fishermen. We have interviewed buyers of freshwater fish all over North America. We understand the marketplace, the distribution channels and the difficulties of the industry. We have also worked for the saltwater fish industry on both coasts.

Secondly, we have conducted a number of economic development projects for municipal and regional district governments. These projects require imagination and foresight. We conducted one recently for the Cariboo Regional District in British Columbia. As a result of that study, several initiatives have been launched and are succeeding. Thus, we practice a form of economic development which shows results.

Finally, we have worked in the North. The author of this proposal is currently involved in four studies in the Yukon. Our firm has also, under the leadership of Mr. Gabe Shelley, Partner in charge of our Edmonton office, conducted a large number of projects in the Northwest Territories. Our consultants understand and enjoy working in the North.

III

OUR GENERAL APPROACH

A. OUR APPROACH IS POSITIVE BUT OBJECTIVE

We will be looking for opportunities to enhance the return to the Great Slave Lake fishermen and to the local economy. Our search should be far reaching and all encompassing, within reasonable budgetary limits. We should not be too critical in our initial seeking of opportunities.

Once the opportunities are well identified, we need to assess objectively for you their probability of success. Our experience will be critical on this assessment. An over-optimistic consulting study will not serve you well. It will simply serve to raise falsely expectations which cannot be met and provide further dissension for the''industry.

B. OUR APPROACH IS MARKET DRIVEN

The success of the study will be a function of the marketing work. We need to talk to the food service and retail trade as well as the brokers, wholesalers and distributors who comprise the distribution channels. We need to find out:

- Is the Great Slave Lake product differentiated by the marketplace from whitefish produced by the Great Lakes and the prairie provinces?
- What is the market's perception of the Great Slave Lake product and if it is regarded as superior, is it being exploited sufficiently?
- Outside of the traditional and ethnic markets in North America and Europe, what other markets have been developed or could be developed?
- Could existing markets be served better either with fresh fish direct from the lake sold correspondingly at a premium or by reducing distribution costs and overhead?
- Are there opportunities for using coarse fish?

The answers to these and other questions lie at the heart of the study. Once we have familiarized ourselves with your fishery, the product seasonality,

operating methods and costs -- we will move quickly to address these market issues.

Once we have completed and agreed our investigation of the marketplace -- existing and potential -- then we can move back into the distribution channel and determine the best way to serve the market defined. In this phase, we will review distribution methods, the need for processing facilities and marketing expertise and the extent to which the return to the fishermen can be increased.

C. WE WELCOME YOUR PARTICIPATION

A key to any successful consulting assignment is the commitment by and involvement of the client in the study. Client ownership of the study results occur and surprises are eliminated.

Thus, we welcome your desire to participate in the study. At the outset, we will seek your input regarding identification of potential buyers and markets to make sure that you do not leave any stone unturned.

In the next step, we will be proposing that the initial market interviews should be carried out by the consultants alone. We are well aware from previous studies of the relationship between brokers/wholesalers and the FFMC. We are also well aware of the range of feelings that can exist between the fishermen and brokers/wholesalers. We have also at stake our professional reputation in maintaining confidentiality of the results of our interviews with the individuals unless they indicate otherwise. Thus, we feel strongly that in order to have open, fruitful interviews, the initial market interviews should be done by the consultants themselves.

However, as we start to pull together the results of the market work, we will set up meetings with potential buyers and the group indicated in your Terms of Reference. We will be sitting down to discuss how to realize certain opportunities. It may also be useful for the same individuals to be exposed to some of the more conservative elements of the marketplace in order to have a good overall understanding of the market -- its strengths and weaknesses.

Certainly, as we work through the feasibility of establishing local processing and marketing capability, local input to the study will be critical and of great assistance to the usefulness of the outcome of the study.

D. WE SHOULD NOT UNDERESTIMATE THE MAGNITUDE OF THE TASK

Irrespective of the effectiveness, efficiency and monopolistic position of the FFMC, that organization does market each year approximately 40 million pounds of fish -- the bulk of which of course is whitefish. Thus, a good portion of the FFMC's marketing budget has been aimed at finding markets for and promoting whitefish -- market research, packaging, product development and promotions and advertising campaigns.

We do not suggest that there are not specific new markets that the Great Slave Lake fishery could serve better or existing ones that you could serve at lower cost. However, we should not deceive ourselves that the task will be easy. It is a challenging one and will require imagination and our combined resources to accomplish.

IV

OUR PLAN

To meet your requirements for the study, we have designed a work plan consisting of three phases:

- Phase 1: Data collection and analysis.
- Phase II: Identification and evaluation of options.
- Phase 111: Final report and action plan.

The interrelationship of these phases and the work steps that go to make up each phase is shown in Exhibit IV-1. In the paragraphs below, we discuss each of the above three phases and their work steps.

A. PHASE I: DATA COLLECTION AND ANALYSIS

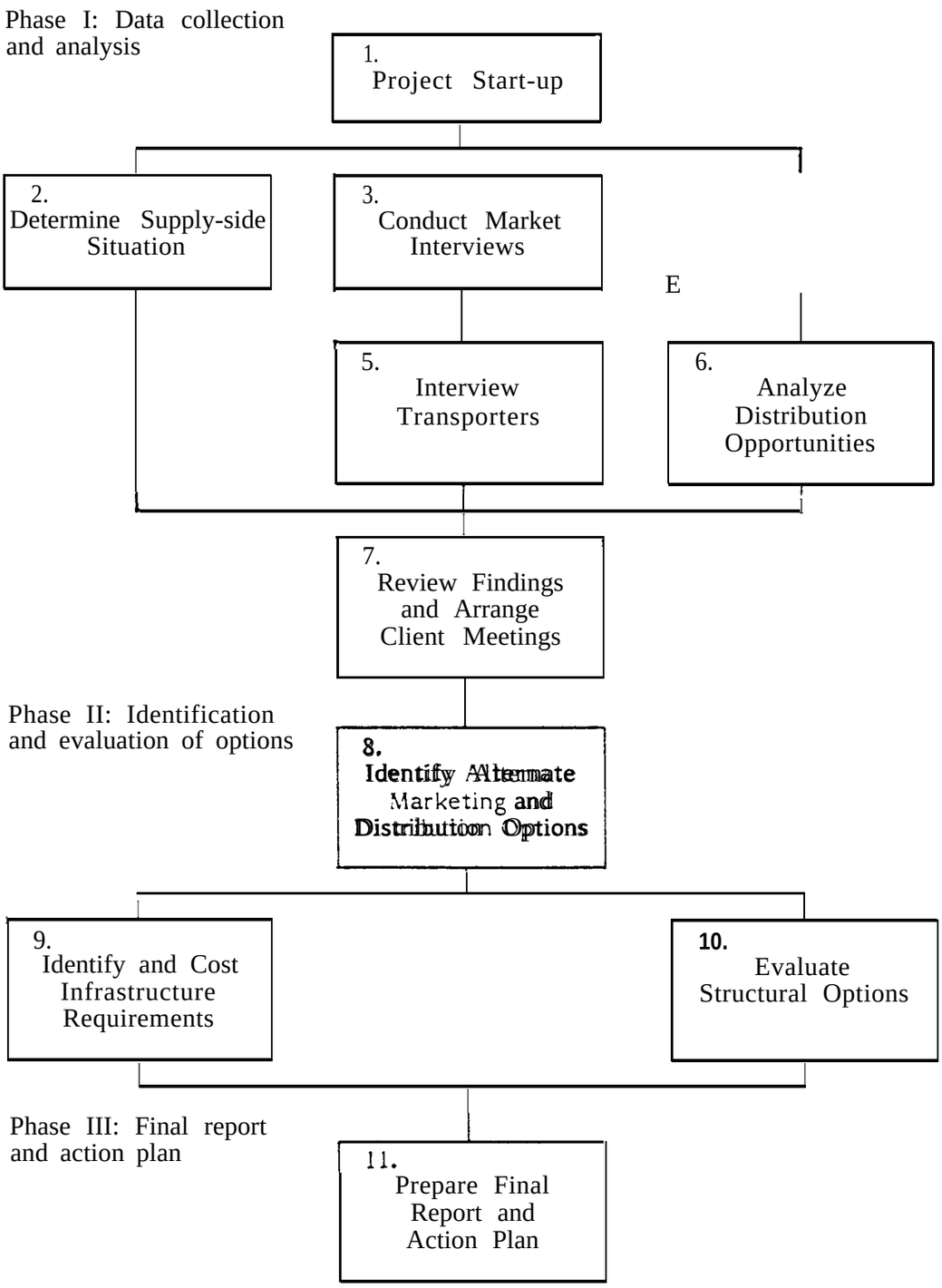
1. Project start-up

Upon receiving your authorization to proceed with the study, we would request a meeting with you to start-up the project. The objective of the meeting would be:

- To reconfirm the objective, scope and methodology of the project.
- To agree upon deliverables and output you would expect from the completion of the project.
- To agree upon the detailed project plan and schedule.
- To agree the project organization, you may wish to form a steering committee and appoint a project coordinator. For the purpose of this proposal, we have assumed that Mr. French would be project coordinator.

We will also ask your counsel at this meeting on the extent to which we should contact the Freshwater Fish Marketing Corporation for relevant statistics and information on their current client listing.

EXHIBIT IV-1 "
Work plan



2. Determine supply-side situation

Before heading out to interviews in the marketplace and distribution channels, we should have a good understanding of the Great Slave Lake Fishery and what it comprises.

We propose meetings with the fishermen from the Federation, if necessary in groups, to learn of their concerns, opportunities that they perceive, plans for expansion/contraction and as much as we can about the fishery itself -- species, seasonality, winter production, etc. We will be seeking information on problems with the present system as well as perceptions of future opportunities. We will be seeking to understand the economics of the fishery, the return required for reinvestment in the fishery, and to understand product attributes.

During the same visit, we will collect historical statistics on the fishery by species and by month for the last 10 years. We expect that the Department of Fisheries and Oceans will be able to provide this information.

We will also collect historical information on prices paid to fishermen both initial and final payments by the FFMC and the extent to which local sales can be measured. We will want information on sales and distribution costs. This will be available from the FFMC. We are familiar with some of these costs from our previous work in the industry. We will collect and review any existing and pertinent market reports and studies. You have recently had a Senate committee hearing. We may be able to obtain information those hearings either through the final report or through a summary of the proceedings.

There mav also be some kev individuals within the Government of the Northwest Territories; who should be interviewed in this work step.

Finally, we will make a list of existing and potential purchasers of Great Slave Lake production. Your input will be critical to that list. We may also have to contact the FF MC for their listing. We should discuss that aspect with you before proceeding.

Our objective in 'this work step is to arrive at a very good understanding of the fishery, its economics, the nature of the fishery, concerns and opportunities. We then have a good solid base from which to proceed from the exploration of the market and of the opportunities.

3. Conduct market interviews

In the previous work step, we will have identified the supply characteristics of the Great Slave Lake Freshwater Fishery. In this step, we examine the marketplace.

We are not aware of any published material available on the freshwater fish market. We will obtain our market information by personal interviews with those market participants who either currently purchase freshwater fish or could conceivably purchase freshwater fish under different circumstances. Specifically, we expect to contact representatives from the following groups:

- Processors.
- Wholesalers.
- Brokers.
- Retail organizations.
- Hotels, restaurants and institutional organizations.

We will prepare an interview guide for these interviews and present it to you prior to using it. For your interest, we present a first 'draft of the Interview Guide in Appendix A to this proposal.

We anticipate completing approximately 40 interviews. These interviews will be located in the Prairie provinces, Montreal and Toronto, New York, Chicago, Detroit and Los Angeles. We may add to these locations as a result of our discussions in Step 2 above with you. We have already identified 30 interviews that we anticipate conducting. We have assumed that you will have additional contacts which will raise a total number required to 40.

We will contact the processors, wholesalers, brokers and major retail chains and interview them directly. With respect to the HRI trade there are typically a large number of small operators in the restaurant side and a small number of large operators in the hotel (including large franchised restaurants with central buying) and institutional side. We have found the most appropriate means to obtain information from this group is to hold meetings at their monthly association meetings and to meet major representatives of the industry.

In additional to questions of volume flow, we will want to identify the following types of market issues:

- Identification of unsatisfied demand

  by species
  by time review.

- Time points

  by species
  by time review.

- Patterns of distribution.

- Sources of supply.

- Preferred means of presentation (fresh, frozen, package types, unfrozen)

  volumes by type of presentation.

- Trends and consumption

  by species
  by means of presentation.

- The role of intermediates that process.

- Species substitution and price sensitivity.

This last point is critical. In our experience, outside the traditional and ethnic market, there is little species loyalty. Freshwater fish does compete directly with saltwater species. Questions of price and reliability of supply are important.

Finally, we will be interested in product quality. The marketplace distinguishes between the various fisheries in Canada and the United States. We will be interested in the market's perception of the Great Slave Lake fishery and how it compares to other fisheries in the provinces and around the Great Lakes. Does the Great Lake's fishery have a competitive edge that can be exploited in the marketplace?

4. Analyze market 'opportunities

Once we have completed our market interviews, we will sit down to identify, quantify and evaluate the market information that we have collected. We will segment the market not just by food service and retail but also by type of end user. We will examine the growth potential for each of the market segments and finally will assess the potential for distribution and sale of the Great Slave Lake product to those segments.

5. Interview transporters

We are familiar with the transportation network on the Great Slave Lake from our recent study conducted for the GNWT. In this work step, we will interview transporters and identify those rates that could be available from Hay River to various market locations.

6. Analyze distribution opportunities

In this work step, we will seek to identify opportunities for decreasing distribution costs and/or providing better service to the marketplace for which a higher price can be demanded.

Fresh fish command a premium in today's market over frozen fish. Such market opportunities provide a means of increasing the return to the fishermen, as long as distribution costs are not prohibitive.

We do not propose to undertake a detailed distribution study. However, from our knowledge of your industry we will analyze and recommend opportunities for improving the distribution networks.

7. Review findings and arrange client meetings

At the end of work steps 1 to 6 above, we will prepare a working paper summarizing our findings. We will describe market segments, opportunities for growth, and improvements in the distribution system. We will provide, in essence, our assessment of the marketplace as it pertains to the Great Slave Lake Fishery.

We will discuss with you those findings, particularly with a view to ensuring that we have not left any opportunity unexamined. We will be trying hard to produce a definitive statement of what opportunities are available to the Great Slave Lake fishermen.

At the same session, we will identify two or three meetings with potential and existing buyers and start the process of moving towards realization of the market opportunities.

It may be that we should hold the Steering Committee meeting outside of Hay River and closer to market locations so that the Steering Committee group can move directly to the meetings with buyers, that we are proposing. We envisage two or three meetings taking place; at" least one of which would be in Alberta.

We would endeavour to schedule the meetings so as to minimize travel costs and disruption to the working lives of the Committee members.

The output of this first phase of work should be a good appreciation and understanding of the market for freshwater fish in general, and the Great Slave Lake product in particular. We need to reach some consensus on our appraisal of the market before we can proceed to the next stage.

B. PHASE II: IDENTIFICATION AND EVALUATION OF OPTIONS

8. Identify alternate marketing and distribution options

At a third meeting with the Steering Committee, we would outline alternate marketing and distribution options. This meeting should coincide with Step 7 above so that travel costs can be minimized. In light of our market assessment we will propose alternate ways of realizing market opportunities. These could include:

- Opt out of the FFMC arrangement and establishing a marketing and distribution entity in Hay River to process and sell Great Slave Lake freshwater fish.
- Opt out of the FFMC arrangement and strike a deal with, say, a third party processor in Alberta to handle and market Great Slave Lake fish.
- Maintain the status quo with respect to FFMC but obtain special dispensation to target directly certain specific markets not served or served well by the FFMC.

There may be other options but we do not envisage more than four or five in total. If you agree that these are reasonable alternatives in the balance of Phase II we will quantify the benefits and costs of each option and recommend a preferred strategy.

9. Identify and cost infrastructure requirements

In this work step we will identify the infrastructure required in terms of:

- Processing facilities.
- Storage facilities.
- Transportation systems.
- Marketing means (including the costs of promotion).

- **Channels of distribution.**

When considering the alternative of establishing a plant in Hay River, we will need to identify production capacity, production season, raw material supply, production shift and plant operations, including weighing, grading, washing, cutting, packaging and storage. We will need to define physical plant requirements and areas required for weighing, sorting, grading, processing, cold storage, dry storage, equipment room, plus freezer and office, washroom. We would **also need** to define staffing required in each of the areas as well as other overhead and fixed costs. We have, as a firm, conducted this analysis for a number of fish processing and marketing organizations. Much of the information we already have on file. It will, of course, need to be tailor-made for a processing plant in Hay River.

We should identify the need for marketing personnel and likely marketing expenditures. You may prefer to use brokers as the main focus of your marketing effort. . . However, our experience is that you require some marketing capability. Relying on brokers alone is not sufficient. They have a wide range of other producers' interests also requiring their attention.

In any event, we will describe a marketing and processing capability that is appropriate for Great Slave Lake fishery.

When we consider using a third party processor from outside of the Territories, we need to obtain from that processor some indication of their costs, capacities, and requirements with respect to supply.

10. Evaluate structural options

We will now have sufficient information on revenues, operating and capital expenditures, to enable us to provide an evaluation of each of the structural options defined in Step 8 above at the beginning of Phase II.

Starting with the retail price per pound for each of the principal products, such as export whitefish, we will move through the distribution channel deducting retail mark-up, distributor mark-up, processing, transportation and marketing costs to arrive at a final price to fishermen. We will prepare this analysis for each of the structural options defined above. Obviously when considering a plant at Hay River, we will have to make certain assumptions about volumes when spreading fixed and semi-variable costs. In this way we can provide comparable information for each of the options.

Our evaluation will be based upon a financial comparison of each of the options. The bottom line is an increased return to the fishermen. However, we should not ignore the social and economic implications of establishing a processing plant in Hay River. That too can be quantified, in part, in terms of the number of jobs created and incomes injected into the local community.

Our approach is aimed at providing the fishermen with a higher return than that achieved at present. At the same time, we will want to provide those interested in investing in infrastructure a satisfactory return on investment and good information to enable them to make a decision to invest. We will conduct some sensitivity analyses to determine the affects of varying volumes and prices.

C. PHASE III: FINAL REPORT AND ACTION PLAN

11. Prepare final report and action plan

We will make our final presentation to you in two forms. We will make a verbal presentation of our findings and recommendations. Second, we will prepare a detailed report complete with an Executive Summary. This report will detail the work which we conducted. As well, if the structural option to establish a plant in Hay River is the preferred option, you will be able to use the report as a marketing tool to attract local businessmen to invest in the process.

Our final report will include an action plan detailing the steps required *to* implement the preferred option.

V

STAFF, TIMING AND COSTS

A. STAFF

The project will be under the overall direction of Mr. Gabe Shelley, Managing Partner of the firm's Edmonton office. Mr. Shelley's expertise is in the area of marketing and distribution systems. He also has extensive experience in the food industry of the Province of Alberta as well as other provinces.

Mr. John Fraser, Managing Partner of our firm's Vancouver office, will be Project Manager for the assignment. Sir. Fraser has been directly involved in all of the freshwater fish assignments undertaken by our firm over the past eight years. Most recently, he undertook for the Government of Northwest Territories an examination of alternative marketing strategies for Arctic Char in the Northwest Territories; Mr. Fraser is working at the moment on four projects for the Yukon Territorial Government. Hence his knowledge of the North and of your industry is considerable. As well as being Project Manager for this assignment, Mr. Fraser would also become involved in the analysis of options and direct the market interview process.

Mr. Brian Dumsday, Senior Consultant in our Edmonton office, will be responsible for investigating distribution opportunities and for establishing infrastructure costs in Hay River. He will also work on the supply side work step and undertake some of the market interviews. Mr. Dumsday is known to you through his recent work on the freighting study on Great Slave Lake. Distribution, plant layout and market research are Mr. Dumsday's areas of specialty.

Also working on the assignment will be Ms. Aldyen Donnelly, Consultant in our Vancouver office. Ms. Donnelly specializes in market research assignments and has conducted several studies for the saltwater fishery in B.C. She has worked recently on aquiculture assignments and on an assignment to investigate the feasibility of establishing a surimi processing plant in British Columbia. Ms. Donnelly is an experienced interviewer and will share the market interviewing with Mr. Dumsday.

Finally, Mr. Stu Press, Partner in our marketing and feasibility group in Toronto will act as Advisor to the study team. Mr. Press has done many projects in the fisheries industry, including with the Kirby Commission. Mr. Press' background in marketing, and specifically fish marketing, will be extremely useful in this project.

Resumes for the above consultants are shown in Appendix B.

We show in Exhibit V-1 our proposed project organization for the study. We have assumed that you will want to establish a Steering Committee for the project and that Mr. Austin French will act as Project Coordinator.

B. TIMING

In your terms of reference you indicate that the successful consultant will be selected on September 30, 1986. We would be prepared to commence work within one week of that date.

We show our proposed work schedule in Exhibit V-2. We expect that the overall project will require three months to complete. Of course, this assumes certain availability of Federation members during the various stages of the project. We are assuming because the project will take place in the Fall that this availability will be better than at other times of the year.

C. COSTS

We estimate our professional fees for this assignment at $46,200. We have based our estimate on an allocation of consulting time for each of the 11 steps described in the previous chapter. We provide our allocation of consulting budget, by each of the phases and work steps, in Exhibit V-3.

Out-of-pocket expenses such as travel, accommodation, long distance telephone, report production, etc. will be charged to you at cost. We propose a budget of $12,000 to cover these expenses. This estimate of expenses is based on three round trip tickets for the Project Manager from Vancouver to Hay River, four round trip tickets for our Edmonton consultant, plus continental travel for the market interviews.

Thus, the total cost to you for the assignment should not exceed $58,200. In addition to that cost, should be added the expenses of your group in traveling to the buyer meetings, as proposed in Step 7 of our work plan and as required in your terms of reference. Four individuals, at an airfare of say $1,000 for a trip of three days with living expenses of $150/day would cost approximately $6,000. Total cost to the project would thus be $64,200.

We trust that these arrangements are satisfactory to you. Our standard terms and conditions are described on the inside back cover of this proposal.

EXHIBIT V-1
Project organization

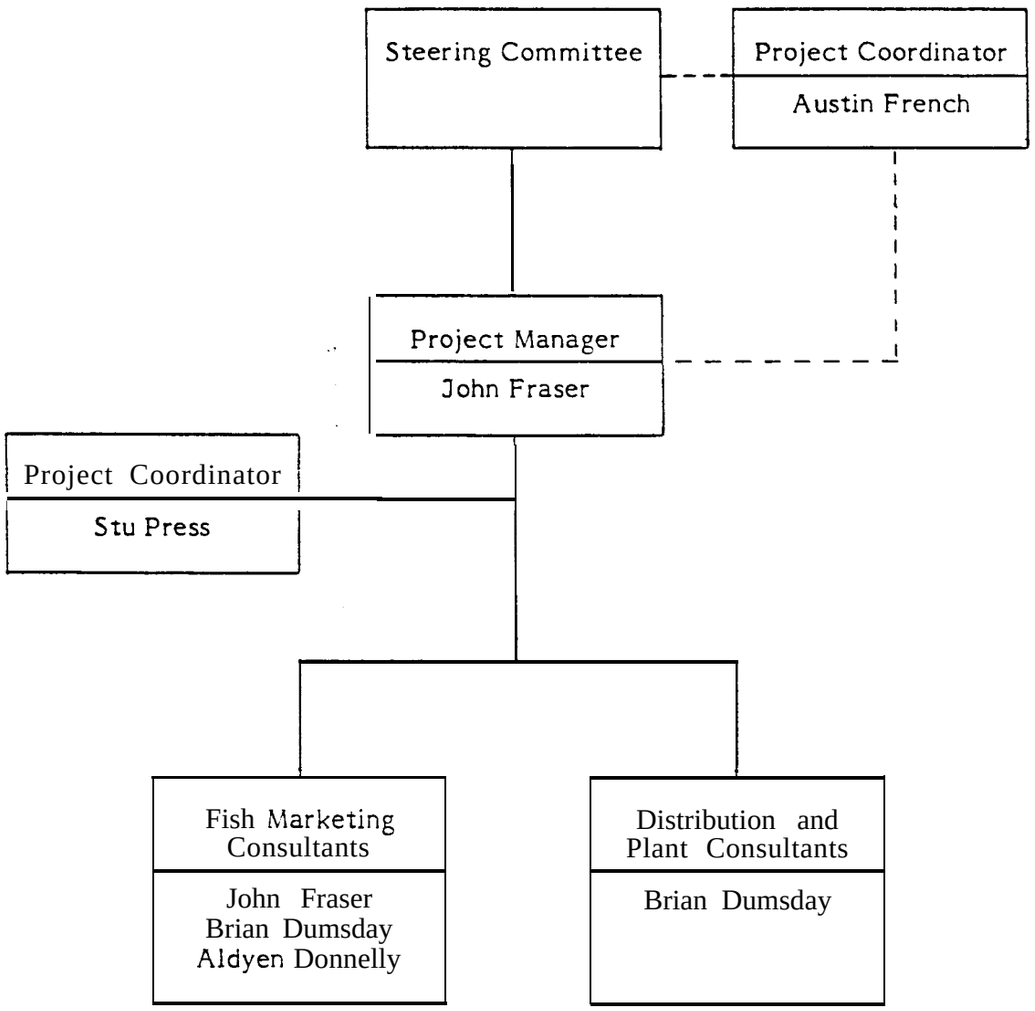
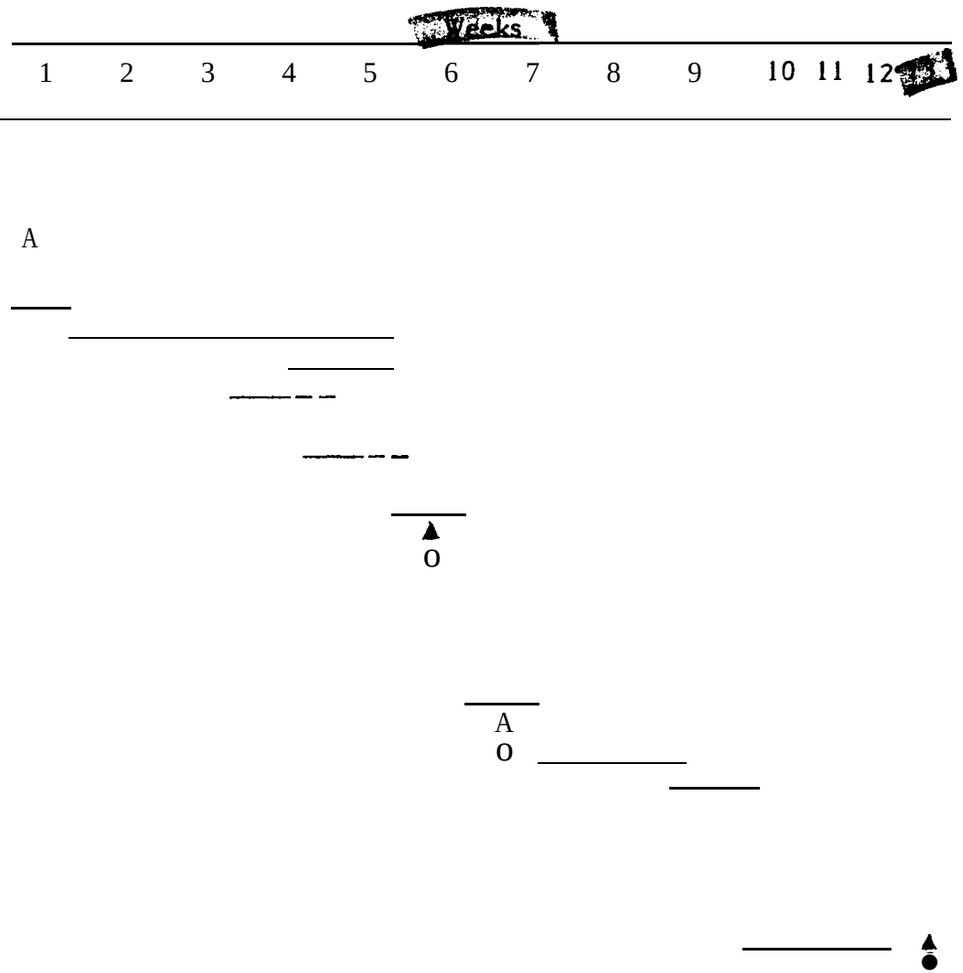


EXHIBIT V-2
Project Schedule



▲ denotes Steering Committee meeting

O denotes working papers

● denotes final report

EXHIBIT V-3
Allocation, consulting budget

		Partner	Senior Consultant	Consultant
		John Fraser	Brian Dumsday	Aldyen Donnelly
			Consulting Days	
PHASE I: DATA COLLECTION AND ANALYSIS				
Step 1	Project start-up	0 . 5	1.0	
Step 2	Determine supply-side situation	1.5	4.0	
Step 3	Conduct market interviews		10.0	10.0
Step 4	Analyze market opportunities		2.0	2.0
Step 5	Interview transporters		2.0	
Step 6	Analyze distribution opportunities		1.0	
Step 7	Review findings and arrange client meetings	3.0	1.0	1.0
PHASE 2:	IDENTIF1CATION AND EVALUATION OF OPTIONS			
Step 8	Identify alternate marketing and distribution options	2.0	1.0	
Step 9	Identify and cost infrastructure requirements		3.0	
Step 10	Evaluate structural options	1.0	3.0	1.0
PHASE III:	FINAL REPORT AND ACTION PLAN			
Step 11	Prepare final report and actionplan	2.0	3.0	1.0
	Total Consulting Days	10.0	31.0	15.0
	per diem	$ 1,162.50	$ 825	$ 600
	TOTAL PROFESS1ONAL FEES	$11,625.00	$25,575.00	$ 9,000.00
				$ [illegible]

VI

OUR QUALIFICATIONS AND EXPERIENCE

In this section we present highlights of work conducted by Stevenson Kellogg Ernst & Whinney in three major areas:

- Experience in the domestic fishery industry.
- Experience in the international fishery industry,
- Experience in conducting marketing/feasibility projects in the North.

A. DOMESTIC FISHERY INDUSTRY EXPERIENCE

1. Newfoundland Royal Commission on inshore fishery

In August 1980 the "Royal Commission to Inquire into the In-shore Fisheries of Newfoundland and Labrador" was formed and given a three-phase mandate:

> Study of the fish processing companies' ability to pay higher prices for fish.
>
> An examination of in-shore fish prices as related to the economic needs of the Province's fishermen.
>
> A study of profit improvement opportunities in the fish processing industry.

Thorne Stevenson & Kellogg was retained to assist with this latter phase. Four main aspects of the industry were chosen for analysis --transportation, marketing, processing and transfer pricing.

During the course of our study several plants and fishing communities were selected for detailed study. The selected aspects of the operations were studied in detail and recommendations made on ways to increase the profitability Several significant productivity and marketing improvements

2. Nova Scotia Department of Development - sardine cannery, Digby, Nova Scotia

Thorne Stevenson & Kellogg was retained by the Department of Development of the Government of Nova Scotia to study the feasibility of establishing a sardine cannery at Digby, Nova Scotia. The work included a study of world wide markets for sardine products and the formulation of a marketing strategy appropriate to a new firm located at Digby. The characteristics and availability of the raw material were also studied and a production system proposed that best suited the constraints of the market, the raw material supply and the present state of technology of sardine canning. Economic projections for the proposed cannery showed the project to be feasible and a cannery is now being built, and is now in operation.

3. Freezing and cold storage study - Prince Edward Island

The purpose of this study was to identify an economically feasible network of freezing and cold storage facilities for Prince Edward Island. Thorne Stevenson & Kellogg and Engineering Service Company Limited joined forces to complete the study with' Thorne Stevenson & Kellogg supplying the analytical economics and distribution systems background.

4. Study of fisheries management - EDP and statistical systems, Department of Fisheries and Oceans, Ottawa

The purpose of this study was to provide the Department with an evaluation of information systems which support the management of domestic and foreign primary and secondary fisheries.

Because there were no formalized program objectives in place at that time, the study team's approach was to have the users identify their information needs and then assess how well these needs were being satisfied using the criteria of completeness, accuracy and timeliness of reporting.

5. Quota monitoring study - Department of Fisheries and Oceans, Maritime Region

The Field Services Branch of the Maritime Region recognized the need for a substantial improvement in the information systems which support quota monitoring. The Computer Services Division was instructed to initiate a project to put in place a real-time information system to support the quota control operation.

Thorne Stevenson & Kellogg were employed to prepare a statement of user requirements, a description of the system and an overview of the project plan required to complete the project. This project is in its final stages.

6. Fisheries Council of Canada - fish marketing strategy study

This study was requested by the members of the fishing industry of Canada in order to identify ways of increasing fish consumption in Canada. This extensive study of all the marketing problems of the Canadian fish industry was sponsored jointly by the federal and provincial governments.

Because of the detailed consumer information required to obtain an accurate answer to the problem, the consultants organized a survey in which 1,500 housewives recorded their food purchases for one year. Only in this way could true facts be separated from opinions and attitudes in order to plan the necessary corrective marketing programs.

The assignment consisted of seven stages, culminating in specific recommendations designed to increase fish consumption in a country where a large proportion of the population eats mainly meat. The recommendations were based on the many interesting attitudes and actions revealed in the study.

The seven steps in the project were:

Determine the attitudes of consumers.

Confirm or deny the existence of a relationship between the attitude of the consumer and what he or she actually does when deciding to eat or not to eat fish.

Identify the attitudes of key influential groups such as buyers for public organizations and the food editors of magazines.

Identify the attitudes of the trade (people who sell food) toward the fish industry and its products.

Make a survey of the U.S. market to determine its relationship to the Canadian market.

Identify specific marketing opportunities.

Develop marketing strategies in products -- strategies for the approach to the trade and the consumers and the form of communicating with them.

7. National Sea Products - executive salary evaluation and compensation plan

We undertook a salary study of this company for its top executives. The study encompassed positions in Canada and the United States from the

Chairman of the Board and President down to Managers of its Operating Division and including its Marketing and top Administrative staff.

8. Atlantic Fish Processors Co. Ltd.- Newfoundland

We carried out several assignments for this company over an extended period. These studies included:

Equipment study and plant layout.

Acting in the role of marketing director.

Management controls design.

Supervisory training.

Staff training.

installation of an incentive system.

9. Acadia Fisheries Limited, Nova Scotia

We have carried out a number of assignments for Acadia Fisheries Limited (now Canso Seafoods). These included:

Supervisory training.

MTM training of an analyst.

Development of performance standards for cost and incentive purposes.

Audit of the layout of a new plant at Canso.

Methods work on stern trawlers.

Computer feasibility study -- Canso.

10. Booth Fisheries Canadian Co. Ltd.

We submitted a proposal to reduce operating costs for the Booth Fisheries Canadian Co. Ltd. at Petit de Grat 'plant in Nova Scotia. We recommended a five part industrial engineering study and training program to achieve results:

Phase I - conceptual design and review of the process.

Phase 11 – engineering of required changes.

Phase 111 - training of Booth Fisheries staff.

Phase IV -- work measurement and determination of the proper method of incentive application.

Phase V -- installation of incentive standards.

11. B.C. Packers Limited

We conducted a number of assignments for this company, including:

Analysis of labour usage in present and proposed plants.

Industrial engineering study.

Fish storage and processing capacity study.

Methods engineering study -- halibut fletching line.

Method study – halibut and salmon steaking operation.

Cost comparison -- existing method of packaging against method using cryovac principle.

Development of equipment to package prepared fish products.

12. Fishing communities — social policy issues — task force on the Atlantic fisheries

Our associate firm, Abt Associates of Canada, were engaged to provide a background perspective on the social policy issues relating to the future of Atlantic coastal communities. The focus of their work was the key factors and lessons to be learned from Canadian and other countries' experience of resettlement and relocation.

13. Feasibility of a surimi industry in Western Canada

We conducted an investigation of West Coast ground fish resources to determine their capability of supporting a B.C.-based surimi industry. Current market development activities in Alaska and other parts of the U.S. were surveyed as well as a review of Canadian, U.S. and offshore markets for surimi-based products. Recommendations were made regarding fisheries management, industrial and market development options.

14. Analysis of management options and ownership structures for a B.C. Native co-op association

This study addressed many planning issues regarding the acquisition of a fish processing plant adjacent to Reserve lands. A range of ownership and business management options were reviewed before we developed and approach to plant management and acquisition that supported the best economic return to the Council.

15. Evaluation of market for freshwater fish in Alberta

We conducted interviews with fish brokers, wholesalers/distributors, processors and retailers to determine the options available for the marketing of freshwater fish in Alberta. A structural analysis of these options was also provided.

16. Evaluation of alternative marketing strategies for Arctic char

The Government of the Northwest Territories commissioned this study to evaluate alternative marketing strategies for the export of Arctic char from the Territories. We surveyed brokers, wholesalers and distributors of fish, as well as large food service and retail chains. The study determined prevailing market conditions for Arctic char and made specific recommendations concerning its marketing.

B. INTERNATIONAL FISHERY INDUSTRY EXPERIENCE

1. A consumer-oriented private conglomerate

We undertook a corporate development planning study in the American fishing industry, with special emphasis on the marketing environment of crustaceans.

The project began with a scientific review of the present and future supply of Alaskan King Crab and Snow Crab, its environmental and regulatory constraints. It went on to consideration of the market in the United States -- interviews with large national sample of consumers, in-depth conversations with distributors of all kinds including chain managers, with special emphasis on purchasing criteria and the determinants of brand recognition.

Backed up with a long-term economic analysis of American food consumption trends, such as the per capita consumption of various leading main course items, the project also reviewed the potential competitive supply of crab from waters outside the Bering Sea and the critically important implications of this

situation for corporate development and marketing. Emphasis throughout: the information need for decision making on development investment in the industry.

2. Icelandic government

Thorne Stevenson & Kellogg was asked to carry out a study of the fish industry for the Icelandic government, under the sponsorship of UNIDO (United Nations Industrial Development Organization).

The objective of the study was to increase the volume and profit of canned Icelandic fish sold on world markets. The industry had been operating at only 5% of its canning capacity, selling most of its product in a commodity form direct to other countries for processing. The major steps of the study were:

Identify the quantity of each species and the sustainable yield available to the Icelandic industry.

Evaluate the sectors of the world market accessible to Icelandic product, estimating market share, form of product and expected revenue.

Develop a marketing and production strategy for Iceland to exploit the most profitable sectors of the market, processing, canning, warehousing, to marketing and distribution.

Recommend steps to rationalize the industry at all stages, from fleet operation, catching fish, through landing, processing, canning, warehousing, to marketing and distribution.

Recommend changes in legislation and organization within the industry to enhance its development.

Prior to the study, Iceland was exporting only lumpfish caviar in significant quantities. Owing to the low volume of low return, due largely to inadequate attention to marketing, the industry was unable to generate funds for market development. In turn, it was unable to attract outside financing.

As a result of the study, we identified profitable markets for caviar, herring, sardines, trout and clams — in value — added and gourmet form as well as in commodity form. The industry is now being considered favorably for major financing to implement the proposed strategy.

3. Republic of Peru

Master plan for 150,000 ton fishing complex. The study was commissioned by the Republic of Peru. We prepared a master plan and undertook

the detailed design of the first stage of construction of a fully integrated fishing complex for the Port of Bayover. The study included:

Feasibility study of alternative processes and outputs in view of available raw materials (species, seasonality, etc.) and potential domestic markets. Included in the study was a detailed analysis of the economics of scale of all major processes: catching, processing, distribution and marketing.

The design of fish processing plants together with ancillary facilities and services for receiving and treating varying quantities and species of fish. Preliminary estimates indicate the need for frozen and refrigerated storage for about 12,000 tons and an ultimate overall processing capacity of some 150,000 tons per annum.

The design of harbour facilities to accommodate and service fishing vessels including factory ships, trawlers, and shore boats ranging in size from 20 to 2,000 tons deadweight; and leaving open the possibility of expansion for larger fishing vessels in future projects.

The selection of the location for satellite town and the planning of the overall related facilities.

Basic services applicable to fish processing, the harbour and the town, such as:

Supply of drinking water.
Supply of electrical energy for power and lighting.
Supply of oil and/or gas.
Supply of salt water for fish processing, fire protection, etc.
Facilities for transport by road and air including the provision of access to highways and an airstrip.
Domestic and industrial waste -- water treatment disposal.

The site was virtually uninhabited and had a minimum of manmade infrastructure. The project was designed to transform it into one of the most advanced fishing complexes in Latin America.

4. Government of Australia (Papua, New Guinea)

Assessment of a feasibility study of fishing developments of Papua, New Guinea. This study was carried out on behalf of the Government of Australia, acting in its role of administrator of Papua, New Guinea. We were contracted to assess a feasibility study prepared by a group of Japanese experts. The feasibility

study was for an integrated tuna fishing complex. Specifically, our job was to lead a team of Australians in:

Observing the field work of the feasibility study groups.

Assessing the final feasibility study for its acceptability and attractiveness to Papua New Guinea.

Our reports to the Australian government assisted **them** in their discussions with the Japanese study team, to select the most desirable development strategy.

5. People's Democratic Republic of Yemen

Thorne Stevenson & Kellogg was retained by the Government of the People's Republic of Yemen to undertake a feasibility study of a proposed fishmeal and fish oil plant. The study was sponsored by the Kuwait Fund for Arab Economic Development.

This extensive feasibility study considered such aspects as:

Economic feasibility of the plant and its foreign exchange impact on the country. Forecasts were made of the potential earnings in foreign exchange.

Species and volume of catch along the coast of the People's Democratic Republic of Yemen which could be used as input to the plant.

Specification of the most suitable fishing vessels to be used to ensure a uniform, reliable flow of raw material to the plant.

Selection of the most suitable site for the plant and recommendations on the proposed layout and equipment.

A phased development plan for the plant and the staff needed to operate it most efficiently.

Study of work production and consumption of fish meal, oil, and their by-products and recommendations on the most suitable markets for the plant's products.

6. People's Democratic Republic of Yemen

Fish meal plant review. As a result of our previous feasibility study of a fishmeal plant, the People's Democratic Republic of Yemen proceeded with a project to develop a plant with capacity of 500 tons per day. During the

construction of this plant, we were again retained to review the entire project including:

The fish catching capability of the system and the fleet development plan.

A technical review of detail plant construction and equipment drawings.

Unloading and preservation systems of the raw material and the adequacy of finished product storage provisions.

As a result of our review, a number of changes were made to the project and we were retained to design and call tenders for the construction of six seiners to supply the plant with raw material.

7. People's Democratic Republic of Yemen

Thorne Stevenson & Kellogg was retained to design six seiners having hold capacity of 200 tons each. The job was carried out in association with Evans, Yeatman and Endal of Halifax, Nova Scotia. An international tender call was undertaken which conformed to the rules and procedures for tendering of the Kuwait Fund for Arab Economic Development. This tender call drew responses from 56 shipyards from countries around the world.

8. Government of Nigeria

Fisheries Terminal, Nigeria. The Federal Fisheries Department of the Government of Nigeria is developing seven fisheries terminals to serve the entire Nigerian coastline. Canovex Limited to Halifax, Nova Scotia, was invited to build three of these terminals as a turnkey project. To provide the engineering and economic planning and feasibility studies for these terminals, Canovex Limited retained the Atlantic Canada Consulting Group, of which Thorne Stevenson & Kellogg is a member.

9. Government of Senegal

Fisheries port. The Government of Senegal decided to develop a fisheries port in the south western corner of the country to serve as the focus for future utilization of the major fisheries resources that exist off the southern coast. Thorne Stevenson & Kellogg was selected by the Government of Senegal in an international competition to do the planning for this port. This planning study included:

Hydrographic and topographic surveys to determine the best location.

Assessment and identification of the resource and preparation of a fleet development plan.

Preparation of a technical master plan for the processing plants and all necessary infrastructure including a 15 km long access road.

Study of the economic feasibility and impact of the project.

Plan for the organization and administration of the port and processing complex.

10. Industrial Consultants & Supply Company

Fish freezing and cold storage plant, Ecuador. Thorne Stevenson & Kellogg were retained by Industrial Consultants & Supply Company, Miami, Florida, on behalf of Industrial Pesquera Moteverde C.A. to plan and design a fish freezing and cold storage facility that would handle 400 tons of fish per day. The species of fish processed are mackerel and sardines which are frozen during the relatively short catching season when they are plentiful. Later they are taken from cold storage and canned at a steady annual production rate. This work was carried out in association with Engineering Service Company Limited of Halifax, Nova Scotia.

C. EXPERIENCE IN CONDUCTING MARKETING/FEASIBILITY PROJECTS IN THE NORTH

As well, we have conducted a variety of marketing and feasibility assignments in the North. A brief summary of selected studies follows:

1. We directed a team of consultants from two firms in the assessment of the impact of fish processing facilities on the economy of a Maritime province

The work involved flowcharting the flow of activities, taking inventory of the existing facilities, interviewing the industry leaders and projecting future levels of activities under various scenarios.

2. We directed a project for the Yellowknife Retail Co-op to assess the feasibility of expanding this basic retail facility into hardware, housewares, fresh meats, gasoline and heating oil

We identified the total membership of the Co-op, and conducted segmentation. We then contacted a representative sample of the Co-op membership to identify the interest and trade-offs involved in expanding into these areas. We conducted a random survey of Yellowknife residents to identify the interest

they would have in joining the Co-op immediately, as well as if these five areas were included. We tested for price sensitivity, as well as other characteristics that would need to exist in order for the membership to become an attractive option.

We analyzed results using microcomputer statistical analysis software and identified, by means of cross-tabulations, the true interest in the projects. We saw three of these projects as being feasible, and two not.

For the three feasible projects, we conducted financial analysis showing profit and loss and balance sheet statements. Based upon these results, we recommended to Board management a plan of implementation for each of the projects.

3. We identified the method of freshwater fish marketing that would provide the highest return to Alberta fishermen

This project was undertaken for Alberta Energy and Natural Resources.

The project team interviewed fishermen and customers and identified various marketing options. We applied probable market share values and costs to each option.

4. Economic feasibility for a 35,000 square foot office and retail complex in Cambridge Bay, N.W.T.

This was the first major capital project conducted in Cambridge Bay since the installation of the DEW Line. Feasibility work involved identifying the demand for office space, the capacity and latent demand for retail services, calculating economic feasibility and providing recommendations on alternate funding sources. The project recommendation was approved and the building is currently under construction in Cambridge Bay.

5. Examine the feasibility of an Indian Band acquiring a wood working facility in Hay River

We identified the type of prospective products to be made, interviewed the wholesalers, retailers, construction firms, and developers that would have interest in the products and calculated the size of the potential market. Then based on the cost margins, together with transportation economics and selling and administration costs, we identified the economic feasibility of the project.

6. Examine the feasibility of installing super markets in three northern Alberta towns

The work involved identifying the retail capacity of the towns, matching that against the demographics of each of the trading areas and

calculating the potential market for each installation. The recommendations identified the feasibility, together with the appropriate size and product mix.

D. ABOUT STEVENSON KELLOGG ERNST & WHINNEY

Stevenson Kellogg Ernst & Whinney is an employee-owned Canadian firm of management consultants. We have served governments, public institutions and private firms in commerce, industry and other business since 1936.

Our firm has developed over the years through a combination of internal growth and mergers that has led us to the forefront of Canadian management consulting. In August 1986, the accounting partnerships of Thorne Riddell and Ernst & Whinrrey merged to become Thorne Ernst & Whinney. At the same time, the management consulting practice of Thorne Stevenson & Kellogg was merged with Ernst & Whinney's Management Consulting Services group under the name Stevenson Kellogg Ernst & Whinney.

Two sister companies complement our capability. Canadian Facts is Canada's leading opinion and market research firm. Abt Associates of Canada, with close ties to Abt Associates Inc. in Cambridge Mass., provides social research services to clients in the public and private sectors.

We are affiliated with Thorne Ernst & Whinney, Chartered Accountants and are members of Ernst & Whinney International. This relationship gives our clients access to specialized expertise wherever it exists. It also helps them exploit market and product opportunities around the world.

Our clients have access to a combined staff of nearly 400 professional and support staff. They include many disciplines, such as engineers, accountants, mathematicians, economists, psychologists and management scientists. Many have, in addition to their initial professional qualifications, postgraduate training in business administration, commerce and economics. We have the capability and have demonstrated our ability to tackle the full range of management problems which face our clients.

These numbers and range of competencies make Stevenson Kellogg Ernst & Whinney one of the most broadly based management consulting firms in the world.

1. Our organization

We have 12 offices across Canada. Specialty staff are available to clients in every region of the country.

Our consultants are grouped, for the most part, according to their professional specialty -- computer sciences, economic development, executive and supervisory training, financial controls, health care, hotel and resort management, human resource management, industrial economics, Industrial engineering, marketing management, transportation and physical distribution. Senior staff also have affiliations with major Canadian and U.S. universities that enable our clients to draw on a wide range of expertise.

We aim to provide sound, practical results. We achieve this by being flexible. Staffing is tailored to each client's requirements. Some engagements require one specialist recognized as being outstanding in the field. Others may call for a team of professionals under the leadership of a senior person closely identified with the client's needs. This ability to provide a full range of expertise and in-depth specialization to every client in every region is one of the major strengths of Stevenson Kellogg Ernst & Whinney.

2. A complete range of consulting services

Stevenson Kellogg Ernst & Whinney provides a complete range of management consulting services, including:

- Senior management services

  Directional planning
  Strategic management
  General management and organization
  Downsizing
  Improving managerial performance

- Marketing management

  Market planning
  Market and marketing research
  Competitor analysis
  Product, pricing and promotional strategy
  Sales force management
  Customer service strategy

- Manufacturing management

  Manufacturing strategy
  Manufacturing systems
  Industrial engineering
  Productivity improvement
  Facilities planning

- Physical distribution and business logistics

  Distribution strategy
  Transportation strategy and operations
  Inventory management
  Warehouse location, design and operations

- Human resource management

  Human resource strategy
  Management appraisal and selection
  Compensation
  Relocation counseling
  Executive search
  Training and development

- Informatics Services

  Systems
  Automation equipment
  Communications
  Office productivity through automation

- Finance and administration

  Management controls
  Cash management
  Feasibility studies
  Polices and procedures

Stevenson Kellogg Ernst & Whinney is a member of the Canadian Association of Management Consultants. Our senior staff are members of and actively support the several provincial Institutes of Management Consultants which certify the profession.

Appendix A

MARKET INTERVIEW GUIDE
(first draft)

MARKET PARTICIPANTS PERSONAL INTERVIEW GUIDE

A. BACKGROUND

Name _____ Position _____

Company _____

_____ **Telephone** _____

Address _____

_____

B. **VOLUMES/PRICES**

1. Species	Means of Presentation	Volume	cost/ Pound	Price/ Pound

2. If prices vary by season, identify range of prices.

Price	Price (as % of summer)

C. SOURCING

Species	Source Point	Volume

D. **SEASONALITY**

Month or Season	Sales (pounds)

E. "SUPPLY PROBLEMS

1. Are there any times of the year that you cannot get:

a particular species? What and when? _____

_____

a means of presentation? _____

_____

sufficient volume of freshwater fish? _____

_____

2. If these problems were solved, how much freshwater fish could you sell in total (pounds)? _____

_____

F. CHANNEL

Describe the channels of distribution that you use in marketing freshwater fish?

G. QUALITY

1. Can you describe the attributes of export grade whitefish from different fisheries.

2. How does the Great Slave Lake product compare to other whitefish?

H. PROCESSING STORAGE

1. What processing facilities do you have?

Facility	Capacity	Range of processing types

2. What storage facilities do you have?

Facility	Capacity

1. **SCENARIOS**

If **Great Slave Lake-caught freshwater fish** were directly available

1. what would suppliers have to do to persuade you to switch?

2. what species would you prefer?

Species	Expected Volume

3. **what means of presentation would you prefer?**

Species	**Presentation**	Expected Volume

4. what packaging would you prefer?

Species	Packaging

5. what distribution systems would be acceptable? _____

_____

_____

6. **how** many weeks of inventory would you purchase at a time? _____

_____

_____

Appendix B

RESUMES

GABRIEL C. SHELLEY, B.Sc., M.B.A.

Mr. Shelley is the Managing Partner of Thorne Stevenson & Kellogg's Edmonton office.

He is a graduate of Queen's University with a B.Sc. in Mechanical Engineering and an M.B.A. from York University.

After graduation, he worked for DuPont as a process and project engineer. Subsequently, he was Manager of Industrial Engineering for Dominion Stores responsible for a department concerned with productivity in retail and distribution. Prior to joining Thorne Stevenson & Kellogg, Mr. Shelley was a Manager with an international management consulting firm responsible for the Canadian physical distribution practice.

In his years as a management consultant, he has conducted and directed a wide variety of projects in almost all provinces, as well as the United States, Europe and the Middle East.

Mr. Shelley's experience includes the following:

- Conducted a market strategy assignment for a regional community college in Edmonton. This community college was concerned about its public perception, and at the same time wanted to obtain forecast enrollment figures for discussions with government funding agencies.

  We conducted several types of surveys:

  Random community survey.

  Key employers survey.

  Students and ex-students survey.

  Based on these results, we identified a successful community college that had certain weaknesses as perceived in the marketplace. We recommended certain marketing approaches to acquaint the marketplace with the good work that the college was doing and to enhance enrollment.

  In a parallel phase of the work, we conducted statistical analysis of the enrollment over the past five years. We used employment projections provided by the Federal Government on an occupation-by-occupation basis to project the demand for graduates of the community college's programs. Combining these techniques, we forecasted an optimistic and pessimistic enrollment for the college.

These data have proven useful in ongoing discussions with government funding agencies.

- Prepared a marketing plan for a chartered accounting firm. We interviewed Partners to identify the needs. The plan involved an identification of the various techniques, an evaluation of their relative effectiveness, and a reporting system to monitor results.

- **Managed an assignment looking at the market potential of reinforced** plastic pipe and vessels. The work involved customer interviews and secondary data collection. Various scenarios were developed to show the potential impact on the company, leading to a five-year financial projection.

- Conducted an operational review of a , manufacturer of plastic, energy-efficient windows in Edmonton. The customer service interviews provided the basis of a marketing plan, the operational analysis found profit improvement opportunities through better costing.

- Conducted a market assessment for a manufacturer interested in developing a new type of drill rig attachment. The work consisted of extensive secondary data collection and the conduct of interviews with the leading potential customers in Alberta. Our work identified a potential market as being substantially smaller than that originally envisioned by the client. However, we identified the fact that Price was a lesser concern than some other operational improvements which the device could offer. As a result, our client decided to proceed with the design and marketing of the device.

- Conducted a market assessment for a distributor of heavy equipment and parts. The extensive interviews throughout Western Canada showed that the firm could substantially improve its market share not by opening more branches as had originally been thought, but rather by improving the inventory service on certain types of "emergency" items.

- Conducted a market review for a distributor of stationery and office furniture. Interviews conducted with a large number of customers and potential customers indicated that the market could be segmented into a variety of users. Each user required different product types and service levels. The matrices which were produced allowed the client to determine which market segments he was interested in pursuing and which, **due to prohibitive margins or** service levels, he would abandon. The work served as the basis for a long-term strategic plan directed to the parent company.

- Assessed the financial feasibility of a "bake-off" operation for a national supermarket chain. The analysis involved identification of regional demand, calculation of production costs and determination of potential profitability based on size of store serviced. The analysis was subsequently **used** in a pilot project in several large supermarkets.

- Directed a project to assess the market potential for a new line of specialty baked goods. The study assessed the market in major Canadian provinces as well as the Northern U.S. interviews were conducted with wholesale and retail customers and trade associations.

- Assessment of the technical and financial feasibility of a new type of mud 'screen to be used in the drilling process; the client, an Edmonton-based supplier to the oil patch, had developed the new product and asked us to help determine its viability; our work involved interviewing potential users of the product, estimating **market share requirements and pricing potential; although the product appeared to have certain desirable characteristics, the market entry /breakeven costs relationships proved prohibitive.**

- **Directed a project** for the Yellowknife Retail Co-op to assess the feasibility of expanding this basic retail facility into hardware, houseware, fresh meats, gasoline and heating oil.

  We identified the total membership of the Co-op, and conducted segmentation. We then contacted a representative sample of the Co-op membership to identify the interest and trade-offs involved in expanding into these areas. We conducted a random survey of Yellowknife residents to identify the interest they would have in joining the Co-op immediately, as well as if these five areas were included. We tested for price sensitivity, as well as other characteristics that would need to exist in order for the membership to become an attractive option.

  We analyzed results using microcomputer statistical analysis software and identified, by means of cross-tabulations, the true interest in the projects. We saw three of these projects as being feasible, and two not.

  For the three feasible projects, we conducted financial analysis showing profit and loss and balance sheet statements. Based upon these results, we recommended to Board management a plan of implementation for each of the projects.

- Directed a project for Alberta Energy & Natural Resources to identify the method of freshwater fish marketing that would- provide

the highest return to Alberta fishermen. The project team interviewed fishermen and customers and identified various marketing options. We applied probable market share values and costs to each option. In the final analysis, the best strategy was for the fishermen to remain with the Freshwater Fish Marketing Corporation.

- Conducted a project for Alberta Economic Development to assess the feasibility of a Food Park in Alberta. Through interviews with Alberta-based processors, we identified the types of processors most likely to be attracted to a Food Park. We developed costs and revenues for sample firms" in each process, and calculated the benefits to each type of firm participating. We found that the concept had merit. We prepared marketing documents for the Department which they are now using to attract investment in a Food Park-for Alberta.

- Assessed the cost-benefit impact of moving a firm's head office from Western Canada to Toronto. We looked at cost categories of:

  severance
  salary differential
  staff duplication
  moving costs
  disposition of property.

  Our report showed a good return on investment for the project.

- Directed a team of consultants from two firms in the assessment of the impact of fish processing facilities on the economy of a Maritime province. The work involved flowcharting the flow of activities, taking inventory of the existing facilities, interviewing the industry leaders and projecting future levels of activities under various scenarios.

- Directed a team of consultants from two firms in the assessment of the impact of fish processing facilities on the economy of a Maritime province. The work involved flowcharting the flow of activities, taking inventory of the existing facilities, interviewing the industry leaders and projecting future levels of activities under various scenarios.

- Conducted a project with a provincial agency in Alberta to determine the feasibility of additional pulp mills in the province.

- Directed an assignment for the Transportation Services Branch of the Alberta Department of Economic Development to assess the feasibility of a containerization service between Alberta and other destinations. The feasibility study involved the development of a

questionnaire to be administered in person to more than 50 shippers throughout Canada. As well, the work involved the development by Canadian Facts of a telephone survey instrument to be administered to over 300 shippers throughout the province.

- Directed an assignment for the Food Processing Branch of the Alberta Department of Economic Development to examine the impact of labour concerns in the food processing industry. The project team interviewed 40 processors in the province and determined the major areas of concern. Specific recommendations were made for government action to address these concerns.

- Conducted a project for the Alberta Department of Economic Development to examine the feasibility of expanding the bakery industry in the province. The work involved a substantial number of interviews with industry knowledgeable and operators. Focus groups were held with customer groups in order to identify the market direction and needs. The project resulted in a series of recommendations, with a practical implementation plan for how these recommendations and opportunities can be recognized. The Department began implementing the recommendations almost immediately.

- Directed a project for Transportation Services Branch of Alberta Economic Development to examine the feasibility of Alberta serving as a Western redistribution point. The work involved interviews with manufacturers in Eastern Canada to identify the flows and costs. Using a Thorne Stevenson & Kellogg-developed transportation/distribution model, we analyzed the cost and service implications of the concept.

NORTH EXPERIENCE

- Conducted an economic feasibility project for a 35,000 square foot office and retail complex in Cambridge Bay, N.W.T. This was the first major capital project conducted in Cambridge Bay since the installation of the DEW Line. Feasibility work involved identifying the demand for office space, the capacity and latent demand for retail services, calculating economic feasibility and providing recommendations on alternate funding sources. The project recommendation was approved and the building is currently under construction in Cambridge Bay.

- Directed project to evaluate the economic feasibility of expanding the retail component of Yellowknife Co-Op. The Board was interested in providing additional services to their members,

including fresh meat, hardware, housewares, gas bar and eating lounge. The work involved interviewing a broad cross section of the membership as well as a ten percent sample of the population at large. In addition, we identified the total retail capacity of the City and calculated the retail gap. We modelled the various expansion scenarios on a microcomputer and presented these options to the Board. The impact of alternate financing scenarios was also calculated and recommendations to the proceed along certain financing routes.

The Board accepted the recommendations, and the expansion plans are being developed currently.

- Directed a project to examine the feasibility of an Indian Band acquiring a wood working facility. We identified the type of prospective products to be made, interviewed the wholesalers, retailers, construction firms, and developers that would have interest in the products and calculated the size of the potential market. Then based on the cost margins, together with transportation economics and selling and administration costs, we identified the economic feasibility of the project.

- Conducted a project to examine the feasibility of installing super markets in three northern Alberta towns. The work involved identifying the retail capacity of the towns, matching that against the demographics of each of the trading areas and calculating the potential market for each installation. The recommendations identified the feasibility, together with the appropriate size and product mix.

- Directed a project for the Town of Hay River to implement the Thorne Stevenson & Kellogg compensation system. The project involved interviews with all municipal staff, preparation of job descriptions and identification of the appropriate relative rankings of jobs.

- Conducted an audit of of the job evaluation system for the City of Grande Prairie. Work involved presentations to staff, review of job fact sheets, and working with the evaluation committee to re-evaluate each of the 130 jobs. The end product was a revised ladder chart identifying the relative position of jobs, as well as the identification of new positions required.

- Conducted an organizational review for the Social Services Department of the City of Edmonton. Worked with the senior managers to identify the goals and objectives of the department. We then interviewed all 120 professional staff to identify inconsistencies with objectives, organizational difficulties, operational constraints,

etc. We made 95 recommendations for improvement dealing with organizational mission, goals, organizational structure and processes, inter-departmental communications, and priority identification - evaluation.

- Currently conducting a comprehensive audit for the City of Fort Saskatchewan, Community Services Department. The purpose of the audit is to identify opportunities for improvement, and provide Council with the information to ensure that it is obtaining the best efficiency, effectiveness and economy from the department. We have reviewed basic documentation, interviewed senior managers, and reviewed systems and procedures. The end product will be a scope and findings report that identifies how the Community Services Department can better serve the needs of the citizens of Fort Saskatchewan.

- Conducting comprehensive audit for the Department of Education of the County of Strathcona. Working with the Chief Superintendent of Education, we are reviewing the mission and objectives of the department, conducting attitude surveys among professional staff, conducting community consultation sessions, and interviewing senior managers. The end product will be a scope report identifying opportunities for improvement as well the conduct of several in-depth evaluations. Finally, we leave the County with the procedures and the ability to conduct this type of evaluation by themselves in the future.

Mr. Shelley is a member of the Association of Professional Engineers of Alberta and the National Council for Physical Distribution Management. In addition, he is currently the Western President of the Canadian Association of Physical Distribution Management and was elected to the Board of the institute of Management Consultants of Alberta.

JOHN CORDON FRASER, B. A., Economics, M.B.A., C.M.C.

Mr. Fraser is a Partner with Stevenson Kellogg Ernst & Whinney and is the Office Managing Partner in Vancouver. He attended Victoria University of Wellington in New Zealand where he obtained Bachelor of Commerce and Administration in Economics. He later attended the University of Pittsburgh where he received his M.B.A.

Mr. Fraser started his career with Unilever (N.Z.) Limited as Assistant Manager of the market research subsidiary. He subsequently worked as a management consultant in both New Zealand and Canada. He has recently completed three years in industry in a top line management position. Mr. Fraser was Vice President, Gold Mining and West African operations for Sungate Resources Ltd. located in Vancouver. He was responsible to the President for the "company's "-gold mining and West African logging and deforestation operations.

Relevant assignments include:

A one-year physical distribution study for a large food processor and distributor. Mr. Fraser was responsible for:

- design of management control system
- evaluation of product ranges
- development of organization for managing the distribution function
- formulation of long-term strategies
- assembly of cost data.

The savings achieved exceeded initial expectations.

An evaluation of the market for freshwater fish in the Province of Alberta. Mr. Fraser interviewed fish brokers, wholesalers/distributors, processors and retailers during this study. It included a structural analysis of the options available for the marketing of freshwater fish in Alberta.

A marketing study for a federal freshwater fish marketing corporation. We reviewed the corporation's present and potential markets in Europe, United States and Canada. The final report included a number of specific recommendations for strengthening the marketing function.

A study to determine the type of capital investment which would improve the profitability of a west coast fisherman's cooperative. In this study, we determined:

- potential catch -- herring, salmon, groundfish
- pricing and market potential of end products
- alternative capital projects.

The capital projects were evaluated, taking into. account the magnitude of each project and its impact on the cooperative's fishing system.

Evaluation of alternative marketing strategies for Arctic Char. Mr. Fraser undertook for the Government of the Northwest Territories a project to evaluate alternative marketing strategies for the" export of Arctic Char from the Territories. He surveyed brokers, wholesalers and distributors of fish, as well as large food service and retail chains. This study drew conclusions about the' prevailing market conditions for Arctic Char and made specific recommendations concerning its marketing.

Feasibility study for the establishment of a fish feed processing plant in B.C. Mr. Fraser led a project to determine the viability of starting up a fish feed processing plant in **B.C.** The team reviewed both the supply and demand characteristics of the market. It Identified key competitors, and their respective attributes. It also identified those factors which are key to future market growth and viability. The team made both short- and medium-term recommendations with respect to the viability of establishing a fish feed processing plant in B.C.

ALDYEN DONNELLY, B. Econ.

A consultant with Stevenson Kellogg Ernst & Whinney, Miss Donnelly has partially completed a M.Sc. in Health Services Planning. She also has line experience in the hotel industry, including hotel management, and both industrial and public sector experience as an economist and financial analyst.

In-house and consulting experience includes:

Market research for a major B.C. fish processor" interested in dedicating their herring offal supply to fish feed production. The firm had already established a prototype fish farm and one year into operation wanted to evaluate the merits of getting into feed production for the general market place. Historically, this offal has been an important source of protein for the leading U.S. manufacturer of fish feed, who is also the leading supplier to B.C. fish farmers. Therefore, we examined both the market opportunities, as well as the price and feed supply impact, on the total market, for a range of production scenarios.

Analysis of management options and ownership structures for a B.C. Native Co-operative Association considering the acquisition of a fish processing plant. The plant was adjacent to reserve lands. We addressed a number of planning issues, including

- Should application be made to include the plant site in the reserve?
- Should the plant be managed by a Native team or on contract by others?
- What commitment to training should be included in a management contract?
- Is joint-venture ownership preferable?
- How does reserve status impact on the possibilities for joint venture?
- What are the tax implications to both status and non-status owners that are associated with land status?

We looked at the range of ownership options, and business management options and developed an approach to plant management and acquisition that supported the best economic return to the Council.

Studied the feasibility of developing a surimi industry in western Canada. Project activities included:

- Survey of current development activities in Alaska and other parts of the United States.

- Review of the Canadian, U.S. and offshore markets for surimi-based products.
- Investigation of the west coast ground fish resources, to determine the capability of the resources to support a B. C.-based surimi industry.
- Recommendations regarding fisheries management, industrial, and market development options.

BRIAN W. **DUMSDAY,** B. A.Sc., P.Eng.

Mr. Dumsday is a Senior Consultant in the Physical Distribution group of Thorne Stevenson & Kellogg.

He graduated from the University of Toronto with a B. A.Sc. in Industrial Engineering in 1970.

Since graduating, Mr. Dumsday has worked for a publishing company, a major food processing organization, and a major tobacco products manufacturer. He has specialized in the area of warehouse engineering and layout, materials handling as well as inventory management and distribution.

His project experience includes:

Conducted a market feasibility study for a mechanized pipe handling system to be used on oil-drilling rigs. Our client was still in the early design stage but required market data in sufficient detail to attract potential investors.

Initially, we conducted industrial engineering timings on several Oil rigs to establish the operating parameters of the current pipe-handling system. These parameters formed the basis for estimating potential time and cost savings available through use of the mechanized system.

Armed with the saving potential data we next developed a detailed interview guide for use in the market analysis phase of this study. Once the guide was completed, interviews were conducted with ten of the most active oil companies currently operating in Alberta.

The results of our interviews allowed us to project the size of the potential market based on the total current and projected drilling activity within Canada. The entire study was summarized and presented to our client in a format for use in negotiations with potential investors.

Conducted a marketing assignment for a manufacturer of steel flanges in Western Canada. Our client had recently established a highly efficient forging facility and required market data to assist in his introduction to the market place.

We first designed and tested a detailed interview guide and then conducted over 30 personal interviews with end-users throughout Canada.

The results of our interviews were analyzed and several market strategies were developed, including proposed pricing structure and plans for future expansion into other forged items. Our client was presented with a formalized report at the end of our study for use by his recently hired general manager.

Assisted on a project for Alberta Economic Development to assess the feasibility of a Food Park in Alberta. Through a series of personal interviews with Alberta-based manufacturers., we identified the type of manufacturers most likely to be attracted to a Food Park. We developed costs and revenues for sample firms in each group identified, and calculated the benefits available through participation. We found that the concept had merit and prepared marketing documents for the Department which they are now using to attract investment to Alberta.

Assisted on a project to identify the method of freshwater fish marketing that would provide the highest return "to Alberta fishermen. We began this assignment, conducted on behalf of Alberta Energy and Natural Resources, by developing various questionnaires to be administered both in person and over the telephone to fishermen and customers. The results of these interviews assisted the project team in identifying various marketing options. We applied probable market share values and costs to each option for ease of comparison. In the final analysis, the best strategy was for the fishermen to remain with the Freshwater Fish Marketing Corporation.

Mr. Dumsday is a registered professional engineer and a member of the Institute of Management Consultants of Alberta and the American Institute of Industrial Engineers. He is currently President of the Northern Alberta Chapter of the International Materials Management Society and was recently elected President of the Canadian Materials Handling and Distribution Society.

STUART H. PRESS, Dip. Land Surv., B. Comm., M.B.A., C.M.C.

Mr. Press is a Partner in the Marketing and Business Planning Group of Stevenson Kellogg Ernst & Whinney.

A graduate of Otago University, New Zealand, he holds a Diploma in Land Surveying and a Bachelor of Commerce in Management. In 1974 he received an M.B.A. with distinction from York University.

Prior to joining Stevenson Kellogg Ernst & Whinney in 1975, Mr. Press was Manager, Marketing Research at Kimberly-Clark of Canada. He has nearly 15 years of experience in sales and marketing management, business planning, organizational assessment, marketing research and sales-marketing information systems. He has consulted to clients in a diverse range of industrial and consumer industries in Canada, the United States, and abroad.

Mr. Press's recent experience includes:

Study of the world market outlook for groundfish products. In this project, conducted for the Kirby Task Force on the Atlantic Fishery, Mr. Press directed a study team which investigated the probable future balance of supply and demand for groundfish and its likely impact on future price levels for Canadian fishery exports. Market territories studied included the U.S. A., Canada, the E.E.C., Iberia and the Caribbean. The supply analysis examined likely future production by the major fish trading nations including Canada, Iceland, the U.S. A., Norway, Japan and Argentina. As part of this work, Mr. Press also participated in the development of organizational and policy alternatives for the Atlantic Fisheries.

Identified market opportunities for fishery products. This project was conducted for the Royal Commission to Inquire into the Inshore Fishery of Newfoundland and Labrador. It entailed a comprehensive assessment of fish marketing in the United States with particular reference to groundfish. Areas of study included consumption patterns; imports, exports, market structure, buyer preferences, distribution channels; also organization and marketing strategy of major suppliers to this market. The study concluded with an assessment of market opportunities for the Newfoundland fishery and requirements for their realization.

Assessment of the marketing implications of introducing a government-sanctioned, industry-wide product grading system to the Canadian fishing industry. This project required Mr. Press to identify the many impacts of the proposed system and to estimate its likely impact on industry earnings, both long and short-term. His report

will make a number of major recommendations with important implications for government policy.

Development and evaluation of a series of strategies for communicating product quality to commercial and consumer buyers of fish. This assignment involved the definition of the target audience, development of communication objectives, creation of nomenclature/logo concepts and the conduct of consumer and trade research. The report included well-substantiated recommendations for the adoption of a specific quality mark.

Planning an integrated production processing and marketing system for the Caribbean Community. This study assessed the production, processing and marketing of fruits and vegetables within the Caribbean Community. Estimates were prepared of markets, both domestic and regional, together with comprehensive analyses of the production, processing, transportation and warehousing practices. The final report addressed all aspects of the marketing system, including its organizational and infrastructural requirements.

Development of a growth strategy for the New Brunswick food processing industry. This study estimated present and future demand for processed food within the Atlantic region as well as in selected extraregional markets. It made recommendations to improve the profitability of the industry and foster its long-term growth.

Preparation of a development strategy for the sales, marketing and logistical departments of a meat packing company. This project required Mr. Press to examine the roles and responsibilities of all management positions and to evaluate them relative to the company's strategy. The study led to the re-assignment of responsibilities among existing managers and the creation of several new positions.

Study of sales-marketing effectiveness for a leading food manufacturer. This client was concerned about the implications of changing demands upon their sales force. His work began with an assessment of the probable future role of the sales representative in the manufacturer/distributor interface (both grocery and food service). Then he evaluated his client's existing sales force relative to present and projected requirements. This work led to a comprehensive strategy for upgrading sales-marketing capability. The study resulted in more than 30 recommendations covering staff assessments, training programs, incentive systems, sales and marketing information systems, among others. We are currently working with this client on an ongoing basis to implement the recommended strategy.

Design of an incentive program for the sales force of a major food supplier. This client maintained a national sales organization of nearly 150 persons, all of whom were paid salary only. Mr. Press was retained to develop a new compensation system which provided an incentive for building volume while at the same time encouraged the reduction selling costs. The program was implemented and found to be highly effective.

Design of a state-of-the-art marketing information system for a major food manufacturing company. This project required Mr. Press to work with systems specialists to help identify the information needs of key users -- sales managers, product managers, and major customers. A statement of marketing information needs was prepared along with a framework for the detailed design of the necessary sub-systems and their integration into the company's existing information system.

Mr. Press is a member of The Planning Forum, the Industrial Market Research Association of Canada, and The Institute of Management Consultants of Ontario.