

Canada. Parl. H. of C.
Standing Comm. on Marine
& Fisheries, 1959.
Minutes of
proceedings & evidence.

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HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959



STANDING COMMITTEE

ON

MARINE AND FISHERIES

Chairman: ROLAND L. ENGLISH, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 1

Main Estimates (1960)—Department of Fisheries

TUESDAY, FEBRUARY 17, 1959

FRIDAY, MARCH 20, 1959

WITNESSES:

Honourable J. Angus MacLean, Minister of Fisheries;
Mr. G. R. Clark, Deputy Minister.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

STANDING COMMITTEE
ON
MARINE AND FISHERIES

Chairman: Roland L. English, Esq.

Vice-Chairman: Albert DeB. McPhillips, Esq.

Messrs:

Anderson	Howard	Murphy
Batten	Keays	Noble
Bourget	Legere	O'Leary
Browne (<i>Vancouver-</i> <i>Kingsway</i>)	Macdonald (<i>Kings</i>)	Phillips
Carter	MacLellan	Pickersgill
Crouse	Matthews	Robichaud
Danforth	McGrath	Speakman
Drysdale	McLennan	Stefanson
Gillet	McQuillan	Stewart
Granger	McWilliam	Tucker—35.
Grenier	Michaud	
	Morris	

(Quorum 10)

Antonio Plouffe,
Clerk of the Committee.

ORDERS OF REFERENCE

HOUSE OF COMMONS,
TUESDAY, February 10, 1959.

Resolved,—That the following Members do compose the Standing Committee on Marine and Fisheries:

Messrs.

Anderson,	Grenier,	Michaud,
Batten,	Howard,	Morris,
Bourget,	Keays,	Murphy,
Browne (<i>Vancouver-Kingsway</i>),	Legere,	Noble,
Carter,	Macdonald (<i>Kings</i>),	O'Leary,
Crouse,	MacLellan,	Phillips,
Danforth,	Matthews,	Pickersgill,
Drysdale,	McGrath,	Robichaud,
English,	McLennan,	Speakman,
Gillet,	McPhillips,	Stefanson,
Granger,	McQuillan,	Stewart,
	McWilliam,	Tucker—35.

(Quorum 10)

MONDAY, February 9, 1959.

Ordered,—That the said Committee be empowered to examine and inquire into all such matters and things as may be referred to it by the House, and to report from time to time its observations and opinions thereon, with power to send for persons, papers and records.

TUESDAY, February 17, 1959.

Ordered,—That the Standing Committee on Marine and Fisheries be empowered to print, from day to day, 750 copies in English and 200 copies in French of its Minutes of Proceedings and Evidence, and that Standing Order 66 be suspended in relation thereto.

TUESDAY, March 10, 1959.

Ordered,—That items numbered 127 to 145 inclusive, as listed in the Main Estimates for the year ending March 31, 1960, relating to the Department of Fisheries, be withdrawn from the Committee of Supply and be referred to the Standing Committee on Marine and Fisheries, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

Attest

LÉON J. RAYMOND,
Clerk of the House.

REPORT TO THE HOUSE

TUESDAY, February 17, 1959.

The Standing Committee on Marine and Fisheries has the honour to present the following as its

FIRST REPORT

Your Committee recommends that it be empowered to print, from day to day, 750 copies in English and 200 copies in French of its Minutes of Proceedings and Evidence and that Standing Order 66 be suspended in relation thereto.

Respectfully submitted,

ROLAND ENGLISH,

Chairman.

(Concurred in same day)

MINUTES OF PROCEEDINGS

TUESDAY, February 17, 1959.

(1)

The Standing Committee on Marine and Fisheries met at 10.00 a.m. this day.

Members present: Messrs. Batten, Bourget, Browne (*Vancouver-Kingsway*), Carter, Crouse, English, Howard, MacLellan, McGrath, McPhillips, McWilliam, Michaud, Morris, Noble, O'Leary, Pickersgill, Speakman and Stewart—(18).

Mr. Browne (*Vancouver-Kingsway*), moved, seconded by Mr. Speakman, that Mr. Roland English be the Chairman of the Committee.

There being no further nominations, Mr. English was declared duly elected Chairman; he took the Chair and thanked the Committee for the honour conferred on him.

On motion of Mr. Stewart, seconded by Mr. Noble, Mr. A. DeB. McPhillips was elected Vice-Chairman.

On motion of Mr. Pickersgill, seconded by Mr. Speakman.

Resolved,—That a Subcommittee on Agenda and Procedure comprised of the Chairman and Messrs. Legere, Browne (*Vancouver-Kingsway*), Robichaud and Howard, be appointed.

Agreed,—That the Committee seek power from the House to print from day to day 750 copies in English and 200 copies in French of its Minutes of Proceedings and Evidence.

Agreed,—That the Committee hold its sittings on Mondays and Fridays, as far as possible.

The Chairman announced that he would consult with the Steering Committee respecting the time of the next meeting of the Committee.

At 10.15 a.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Acting Clerk of the Committee.

FRIDAY, March 20, 1959

(2)

The Standing Committee on Marine and Fisheries met this day at 9:30 o'clock a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Anderson, Batten, Browne (*Vancouver-Kingsway*), Crouse, English, Granger, Howard, Keays, Legere, McLennan, McWilliam, Michaud, O'Leary, Robichaud, Speakman, Stewart and Tucker. (17)

In attendance—From the Department of Fisheries: Honourable J. Angus MacLean, Minister; Mr. Lowell A. S. Allen, Executive Assistant. Messrs. G. R. Clark, Deputy Minister; S. V. Ozere, Assistant Deputy Minister, Dr. W. M. Sprules, Special Assistant to the Deputy Minister; Dr. J. L. Kask, Chairman,

Fisheries Research Board; Mr. J. J. Lamb, Director, Administrative Service; Dr. A. L. Pritchard, Director, Conservation and Development Service; Messrs. H. V. Dempsey, Director, Inspection and Consumer Service; I. S. McArthur, Chairman, Fisheries Prices Support Board; W. C. MacKenzie, Director, Economics Service; L. S. Bradbury, Director, Industrial Development Service; T. H. Turner, Director, Information and Educational Service; E. B. Young, Assistant Director, Conservation and Development Service; J. G. Carton, Departmental Solicitor; J. A. Albert, Chief, Financial and Stores Branch; W. R. Hourston, Chief, Fish Culture Development Branch; R. Hart and W. Snaith, Industrial Development Service; L. Morin, Fisheries Research Board; and Mr. O. C. Young, Assistant Chairman, Fisheries Research Board.

The Clerk read the Orders of Reference dated February 9, 10 and 17, and March 10, 1959. (*See printed evidence No. 1*)

The Chairman presented the First Report of the Sub-Committee on Agenda and Procedure. (*See to-day's evidence*)

He then reported verbally on a meeting of Chairmen of Committees which he attended.

After a brief discussion on time of future meetings, recommendations 1, 2, 4 and 5 of the Sub-Committee's Report were agreed to and recommendations contained therein was referred back to the Sub-Committee for further consideration.

The Committee commenced its study of the Main Estimates of the Department of Fisheries.

Items 127 to 130—General Services—were called.

The Chairman introduced the Honourable J. Angus MacLean, Minister of Fisheries.

The Minister made a statement on the work of his Department and its Estimates generally for 1960. He answered questions and commented on the subjects raised.

Mr. G. R. Clark, Deputy Minister, assisted the Minister.

Mr. Howard referred to the practice followed in the printing of Details of Services portion of the Annual Blue Book of Estimates, wherein do not appear the individual votes numbers for each item. He suggested that the Minister confer with the Minister of Finance with a view to the votes numbers being printed in that portion as they are in the first portion of the said Book.

Items 127, 128, 129 and 130 were carried.

At 11.00 o'clock, the Committee adjourned to the call of the Chair.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

EVIDENCE

FRIDAY, March 20, 1959.

The CHAIRMAN: Gentlemen, I see a quorum. Will you come to order, please. This being our first regular meeting, I must say that I am pleased to see you all back in this committee. I express the hope that our deliberations will be as cordial, interesting and beneficial as they were last year, and also that the Minister of Fisheries will consider all your suggestions favourably.

I will now ask the clerk to read the order of reference.

The CLERK: Tuesday, February 10, 1959, resolved—That the following members do compose the standing committee on marine and fisheries. And there follows the membership.

Monday, February 9, ordered,—That the said committee be empowered to examine and inquire into all such matters and things as may be referred to it by the house, and to report from time to time its observations and opinions thereon, with power to send for persons, papers and records.

Tuesday, February 17, ordered—That the standing committee on marine and fisheries be empowered to print, from day to day 750 copies in English and 200 copies in French of its minutes of proceedings and evidence, and that Standing Order 66 be suspended in relation thereto.

Tuesday, March 10, ordered—That items numbered 127 to 145 inclusive, as listed in the main estimates for the year ending March 31, 1960, relating to the Department of Fisheries, be withdrawn from the committee of supply and be referred to the standing committee on marine and fisheries, saving always the powers of the committee of supply in relation to the voting of public moneys.

The CHAIRMAN: Pursuant to a resolution passed at the organization meeting, I have designated Messrs. Browne, Legere, Robichaud and Howard to act on the steering committee.

I will now ask the clerk to read the first report.

The CLERK: First report of the subcommittee on agenda and procedure.

Your subcommittee met on Friday, March 13, 1959. All members were present.

Your subcommittee recommends

1. That a meeting of the main committee be held on Friday, March 20, at 9.30 a.m. as suggested by Mr. Robichaud.
2. That the minister be invited to attend this meeting after which the committee adjourn until after the Easter recess.
3. That the chairman confer with other chairmen to arrange the time and days for future meetings, possibly from 9 to 11 in the morning.
4. That the committee consider the estimates referred in groups with power to refer to any item in any group.
5. That the suggestion of Mr. Howard, relating to a preliminary report on flood control and hydro-electric power in the Fraser river basin in particular with respect to fisheries be deferred.

The CHAIRMAN: Gentlemen, I have conferred with the other chairmen and I wish to report that our committee may hold meetings on Tuesday, Thursday and Friday, if it is your wish. Are these reports agreed to?

Mr. ROBICHAUD: Mr. Chairman, before it is agreed I would like to raise one point. You mentioned that you have contacted the chairmen of the other committees.

I happen to be on the mines, forests and waters committee and this morning that committee is sitting at 9.30, the same time as this one. Also, we are normally sitting on Tuesdays and Thursdays in the morning. So both committees are likely to be sitting on the same days at the same time.

The CHAIRMAN: Yes.

Mr. ROBICHAUD: It is confusing.

The CHAIRMAN: That has been decided at the meeting with other chairmen. It seems there has been a little mix-up.

Mr. ROBICHAUD: Taking this morning as an example, I will be here for a little while but I have to go to the mines, forests and waters committee around 10 o'clock.

The CHAIRMAN: We will refer back this difficulty to the steering committee.

Mr. O'LEARY: What about the time, Mr. Chairman? Was it 9 o'clock that you were recommending?

The CHAIRMAN: Yes. The steering committee recommended 9 o'clock, having two-hour sittings. But we will refer this to the steering committee. Is that agreed?

Agreed.

The CHAIRMAN: As we did last year, we will study the estimates of fisheries, by groups. We will start with the first group, general services. That consists of numbers 127 to 130 inclusive.

It is again my privilege to welcome the Minister of Fisheries, who will make a statement on his department and his estimates for the year ending March 31, 1960. The Hon. Mr. MacLean.

Hon. J. ANGUS MACLEAN (*Minister of Fisheries*): Thank you very much, Mr. Chairman and gentlemen. It is a pleasure for me to have this opportunity to give evidence before your committee and to be welcomed back by pretty well the same membership, I think, as studied the estimates of this department only a few months ago. As was the case last year, the senior officials of the department are present and available. I introduced them to you last year. I do not think it is necessary to introduce them again, because I think you have all met each other now. I might say that for our part, speaking not only on behalf of myself, but all my officials generally, it is pleasant to have a committee the members of which are, I think without exception, definitely interested in the industry and familiar with at least some segments of it in every case.

It is not my intention to try to give a comprehensive all-inclusive review of the activities of the industry and the department, because that would be too large an undertaking and, anyway, I think it is more proper that specialized things should be dealt with under the specific estimates which refer to any particular line of endeavour which my department carries on. It is only a few months since the estimates of this department were carefully reviewed by this committee, and therefore in my remarks this morning it is not my intention to review any general things which are more or less routine and which are now common knowledge to all of you. I do not want to imply by that—and I hope that no one will feel that I am implying any such thing—that there will be any attempt on our part to withhold information from the committee. We are here to give you frank and complete answers on any questions which are in order and which you may see fit to raise on any and all subjects for which the department is responsible.

We hope to be able to answer your questions fully and completely. However, as a starting point I think it might be interesting to the committee if I made a brief review of the industry and the departmental operations over the past year as background to the detailed discussion of individual items in the estimates.

I would like to say a word or two about the general economy of the industry at the present time. For a comparison, it occurred to me that the change from five years ago might prove even more interesting than comparisons of 1958 with 1957. I might say in this regard that I do this because I think it will give a more accurate picture of the general trend as far as the industry is concerned.

I do not want to spend a great deal of time giving you voluminous statistics on the various years, but I might just say that within the industry there has been a general trend of expansion in I think practically all phases of it. This is not to say that there are not from year to year temporary downward movements, perhaps in some segment or other of the industry. But in a general way it is expanding and becoming more important in our economy generally.

Total landings of fish from the sea fishery amounted to 1.73 billion pounds in 1953, while in 1958, despite a very much reduced catch in Newfoundland, the total catch reached 1.85 billion pounds, an increase over the last five years of about 100 million pounds.

The value figures are even more striking—the total having increased from \$76.3 million to \$101.6 million—an increase of over 30 per cent in the five year period. A very big factor, of course, in this comparison was the increase in British Columbia resulting from the exceptionally large runs of sockeye salmon to the Fraser river. However, in the four Atlantic provinces, excluding Newfoundland, landed values were \$6.6 million higher in 1958 than in 1953. This means a gain of over 20 per cent. The increase in this area is a clear indication of the increased interest in the fisheries of the maritime region and Quebec.

Here the introduction of more efficient fishing craft is really having an effect. In my own province of Prince Edward Island there has been an increase over the five-year period from \$2.8 million to \$3.7 million. This is a direct reflection of the development of a completely new offshore fishing fleet operating in the case of Prince Edward Island out of Souris.

In Newfoundland, as I have indicated, 1958 was a disappointing year with landed values down to \$11.4 million as compared to \$12 million in 1953 and \$13.6 million in 1957. So you will see that from 1957 to 1958 there was a drop in landed value in Newfoundland of a little over \$1 million, roughly 10 per cent. Nevertheless the trend over the years is upward in Newfoundland and the 1958 figures were not typical. In Newfoundland, as elsewhere in the Atlantic area, the fleet is being improved and the frozen fish branch of the industry continues to enjoy an expanding market.

From a market point of view we are now entering a new production year; inventories are low and there is keen demand for all our major fishery products. Reports reaching the department on prices being paid during the winter fishing season indicate that new records have been established. Prices will no doubt settle down when the major production season opens in this year, but the 1959 picture looks very promising indeed.

Last year before this committee I reviewed briefly the responsibilities of the Department of Fisheries and the fisheries research board and gave some detail of the work of the various services within the department. It is perhaps unnecessary to repeat what I said last year, but I might mention a few of the highlights of the past year.

A major item of interest was the launching last fall of our new ocean research vessel, the "C.G.S. A.T. Cameron". This fine vessel is now in service operating out of St. John's, Newfoundland and St. Andrews, New Brunswick. Our research staff are very well pleased with its performance and a stepped-up program of offshore research has now become possible.

A year ago I, and also several members of this committee, mentioned our concern over quality. In September I was able to announce that the department would soon be in a position to offer on a national basis, inspection of fresh and frozen fish and of fish processing plants. After April 1 such inspection will be available on a voluntary basis at the request of any processor. Before departmental inspection will be given to these fish products, however, the processing plant itself must meet specific requirements in respect of construction, sanitation, operation and equipment. When the plant has been approved by the department under established standards, the various fish products will be eligible for inspection. Inspected frozen fish products will carry the designation "Canada Inspected". Fresh fish products may be marked with the words "Processed under Government Supervision". Both the department and the fishing industry are confident of a favourable consumer response to this step to make available in retail stores both fresh and frozen fish products prepared under rigid sanitary requirements and which possess all factors of high quality now demanded by consumers.

A number of new projects have been started by our industrial development service. One of the most interesting of these has been the trials carried out with electrical fishing gear on the Atlantic coast. The extremely unfavourable weather conditions during the fall herring season limited our activities in this connection but sufficient has been learned to indicate real possibilities and to justify further investigation during the current year.

Last year the operations of the departmental bait service in Newfoundland were discussed in detail. At that time I referred to certain improvements we were introducing, including the establishment of four small holding units on an experimental basis, the purchase of two refrigerated trucks and expansion of our facilities at Bonavista and Long Harbour. The year 1958 proved to be not only a year of low cod catches, but squid bait was almost unattainable for the second year in a row. Supplies of herring and mackerel were secured in Nova Scotia, and later squid was brought from Norway both by private trade and our own service. Last fall the herring fishery was a failure in Bay of Islands, making it impossible for us to refill our storages to the extent we had planned. We still have some stocks of both squid and herring but we are now making arrangements to secure additional quantities from the maritime provinces to ensure adequate supplies until the spring herring appear off Newfoundland. The four holding units have worked out very well and we are providing for seven additional units in the current estimates. Very severe winter weather has delayed construction of the new Bonavista depot but we are assured that it will be ready for the 1959 season.

Another activity in Newfoundland arising out of the serious loss of income to fishermen, particularly on the northeast coast, was the program announced last October to construct community stages in 20 fishing settlements. Community stages have been recommended for many years as a means of achieving a degree of centralization in small communities where heretofore each fishing crew has maintained its own wharf and fish processing facilities for making salted fish. These individual facilities were not only costly to maintain but frequently were inadequate and unsanitary. This resulted in a wide variation in quality of product and often much lower quality than was desired. The present program was designed to provide work and wages to fishermen as well as to provide a facility of lasting benefit. A special training program was

developed and held at Valleyfield with two fishermen attending from each of the twenty settlements. We have been most encouraged by the enthusiasm shown by these fishermen. Again, however, the unusually severe winter has hampered this work.

In the maritime provinces a wide range of activities, including the long-term program of protection and conservation, have occupied the attention of the department and the research board. A new offshore patrol vessel is now under construction to replace the *Cygnus*. This new 153-foot vessel should be of major assistance in the protection field.

Problems associated with conservation of the Atlantic salmon, particularly those arising out of the program to control the spruce budworm, have been serious over the past several years. However, the budworm infestation has apparently collapsed and spraying will not be necessary this year. Our problem now is one of rehabilitation of the salmon runs. In the Saint John river we have had our difficulties at Beechwood but despite abnormally high water in 1958 we were able to get the salmon run through. Investigations related to the Passamaquoddy power project has been carried forward by the department and the fisheries research board, and a report will be completed this year.

In British Columbia and the Yukon we have been concerned with the continuing problem of overcoming the effects of industrial developments on the major salmon runs. I might say in this connection, in a general way, that one of the problems of conservation is of course the impact of civilization and industrialization on the environment in which fish live. There are very severe changes which follow industrialization and settlement in a natural habitat which may not be apparent to the casual observer, but which the fish are very much aware of. I am referring to such things as changes in the fluctuation of run-off, water temperatures and many other things along this line of which the casual observer is not aware. These things include siltation of spawning beds and the reduction of the sunlight in water by siltation, and contamination and suspension of fine material in the streams, which cuts off the sunlight and reduces the growth of micro-organisms in the streams, on which the fish feed, especially in the early stages of their growth.

You will note in the estimates a substantial item for the rehabilitation of one major producing stream, the Qualicum river on Vancouver Island. Here, for the first time we plan to apply all accumulated knowledge in a concentrated effort to restore and increase the salmon populations in a river where at one time they were of major significance.

As I have indicated, it was not my intention to go into a great deal of detail at this stage, and perhaps I have already said sufficient by way of background for us to proceed with the details of the estimates for 1959 and 1960.

I might say, however, before I conclude, that generally speaking there has not been any great change in the total amount of the estimates for this department for the coming fiscal year as compared with the current fiscal year. As a matter of fact, there has been a slight reduction in the total amount. This, of course, is due to savings here and there and also reflects the termination in one or two cases of large capital programs which were completed last year.

That is not to say that we have not many capital programs proposed for next year as well. But I think in the aggregate they are not quite so large.

Gentlemen, I think that is all I need say at the moment; but we will, as I have said already, try to answer your questions, completely and fully on all the items in the estimates. Thank you very much.

The CHAIRMAN: Thank you, Mr. Minister. If anyone has a question to ask before we come to the first item, I am sure the minister will have no objection to answering.

Mr. CROUSE: Mr. Chairman, there is just one question that arises out of the remarks made by the minister, where he stated that prices will no doubt settle down as the season progresses. Reserve stocks are very low, the demand has increased considerably and the American market is capable of taking larger quantities of our exports. This last fact is realized because their prices are now in many instances double what we are getting in Canada. As a matter of fact, on some species they are getting seven times as much as Canadian fishermen. I refer to hake in that instance.

Why would the minister state that as this season progresses the prices to our Canadian fishermen would be lower, under the present basis.

Hon. Mr. MACLEAN (*Queens*): Perhaps I did not make myself completely clear. I did say that the 1959 picture looks very promising indeed, and that is a fact. I am quite sure that the general trend will be upwards, and I think it will be steeply upwards. That is perhaps a loose term, which I should not use; but it will be up considerably anyway, because of the fact that stocks are low and there is an increasing demand.

My reference to a settling off of prices in some instances referred to the fact that over the last short period there has been an almost astronomical increase in some particular prices. They have fluctuated very widely. They have gone up very rapidly for short periods of time.

All I meant by saying that they will settle down is that some of these prices are prices that I do not think it would be fair to expect might continue through the full production year at the level they have reached in recent weeks. But, as I have said, indications are for a general trend of increase, a very considerable one.

Mr. ROBICHAUD: Mr. Chairman, I would first like to thank the minister for his statement on the condition of the fishing industry in general and on the main activities of the department during the present fiscal year. I am sure every member of this committee was pleased to hear that the prospects were very promising for the year 1959.

As the minister has said, most of us, or practically all of us, have special interests in the fishing industry as we are closely related to this industry in our respective constituencies. We all know our fishermen need better prices for their products. Their costs of gear and equipment are increasing every year. If we take as an example one of the basic species in the Atlantic provinces, namely cod, and realize that our fishermen are being paid somewhat less than they were receiving, say, 10 years ago for their catch—or, I will say, during the war years—we can visualize how important it is that they receive better prices for their catch.

In 1958 the price paid for cod, on the average, was about half a cent to three quarters of a cent more than the previous year, and even at that price it was difficult for the fishermen to make any profit because of their heavy expenses and, in many communities, because of a decrease in catch.

We are also pleased to hear that as from April 1 the department will be able to put into effect, on a voluntary basis, the inspection of fresh and frozen fish. We understand how difficult it has been for the department to get into this field of inspection. It required extensive training for the inspectors who would be engaged in this particular work. I am sure that the general public, not only the Canadian consumer, but the export market, which for this particular type of product is mainly the United States, will welcome this inspection.

I will have some specific questions to ask as we reach different items, but I think those are the main remarks I wish to make at this time.

The CHAIRMAN: Are there any other questions?

Mr. GRANGER: Mr. Chairman, I too would like to say a word of appreciation to the minister for the fine report he has just given.

I was particularly interested in noticing that further steps were being taken to look after the bait situation in Newfoundland because, as the minister is aware, last year the very poor fishery was greatly aggravated by the scarcity of bait. I am sure all the fishermen of Newfoundland will hear this news with a great degree of pleasure.

There is just one question I would like to ask. I understand that fish prices generally have improved. I have been told that in the fresh fish business the market prices are considerably better than they were. Is it fair to assume that we might expect that these improved prices will result in a better income to fishermen?

Mr. MACLEAN (*Queens*): Yes, I think it is fair to assume that. Actually, I think that is a fact. But, of course, in Mr. Granger's province of Newfoundland there are, as everybody knows, a great many communities which are entirely dependent on salt cod production. I think everyone is also aware that this is a product which goes to, generally speaking, a low-income market. The problems in connection with getting a reasonable return, a satisfactory return to the fishermen who are engaged exclusively in the production of dried salt cod, is even a bigger problem than getting a reasonable return to the fishermen whose production goes partly into fillets or some other type of fish product.

However, this is a matter of which the government is very much aware and the problem is great. We do not say there is any easy solution to it or that everything is rosy in the garden, or anything of that sort. I can say that we are very keenly aware of the problems in the dried salt cod industry and, therefore, in Newfoundland generally. We will not rest content until every avenue is explored and we will not leave a stone unturned in our endeavour to assure at least a reasonable income for these fishermen, if at all possible.

This is not only a matter of price. It is a matter of facilities and quality and efficiency. We in the department are not, as you know, directly responsible for trade in fish, but we are directly responsible for trying to do what we can to make the production of fish more efficient.

Our industrial development service and other branches of the department are doing all they can to make the production of fish of all types more efficient and to widen the type of product which is produced so that it will have greater consumer acceptance and a wider market, and therefore be not so dependent on any one particular type of market.

I think it is too early to predict what success we may have; but we hope, for the interest of all concerned, that we will meet with a reasonable measure of success. It is a long-term project however and we cannot reach our objectives in a day, or even a year or a number of years.

By the joint efforts of the industry, the department and the government, as far as trade matters are concerned, we hope that we can create at least an improving trend.

Mr. BROWNE (*Vancouver-Kingsway*): Arising out of the minister's remarks, I am sure we are all encouraged to hear that the general trend of the fishing industry is upwards and that the landed value of the fish had increased. I am wondering how that stands in respect of the number of fish and the amount of equipment used? Does it mean there are more fishermen and more equipment being used to do it, or does it mean the position of the fisherman has improved? I noticed there was a study which came out the other day indicating there are great jumps in the number of fishermen engaged. I wonder whether or not the position of the individual fisherman had been improved?

Hon. Mr. MACLEAN (*Queens*): I think Mr. Browne is referring, firstly, to British Columbia. Generally speaking, in some areas the number of those engaged in the fishing industry has gone down very considerably. There are areas where the number fluctuates and there are areas where the total number has increased. However, generally speaking, I think it is fair to say that the per capita income of the fisherman has had an upward trend. This again we know is not an absolute measure of the situation in which the fisherman finds himself, because costs have also been going up. I think in the last couple of years in most areas, even making an allowance for the increase in cost, his business has improved. But this is not to say that in many areas his position is as good as it may have been fifteen years ago during the wartime economy or in other periods when he was better off.

Over the last few years there is an improving trend. I think this is probably due to the basic fact, in part at least, that world populations are going up very rapidly, including North America where there is a high standard of living and the demand, especially for protein foods, is becoming greater. We are moving slowly towards the position in which countries with a very heavy population have been for years. I refer to such countries as Japan, the Scandinavian countries, and even England, where the consumption of fish per capita is much higher than in North America. As populations increase it is natural that it becomes more economic and more sensible for the general population to include more fish in their diet and less of the other types of proteins which tend to become very expensive as the population goes up and the number of arable acres of grazing land available for the production of beef goes down.

Mr. ROBICHAUD: The minister mentioned there was an indication of a decline in the number of fishermen in the last few years. Is it not a fact that in 1958, due to the serious unemployment situation in the Atlantic provinces there was quite an increase in the number of fishermen engaged in fishing operations?

Hon. Mr. MACLEAN: That is true; but I think it is also fair to say that the estimated increase which we expected did not actually materialize.

However, there has been definitely an increase in the Atlantic provinces, and in the last year probably in most areas—I think perhaps in all areas.

Mr. HOWARD: I have a problem which will make it difficult for me to speak too long, which I imagine many persons will agree is a good thing. I would like to add my own feelings to those which have already been expressed about the opening remarks of the minister. I would also like to add to that the feeling of high regard that practically everyone with whom I have spoken in the fishing industry on the west coast has for the minister in respect of his aptitude and sincerity. They wish him well in his endeavour, and I am sure their present feelings will be fulfilled as years go on.

There are two or three questions I would like to raise. The minister mentioned the rehabilitation of the Qualicum river. Could he explain what methods will be used in respect of rehabilitation not only of this river but also other rivers in a similar position? I understand that there is something classified as a new understanding of the movements of fish or fingerling in the spawning grounds and so on. I do not know whether or not this is to be applied to the Qualicum river.

The other matter which the minister mentioned is the spruce budworm operation which took place. We had a similar insecticide operating program on the northern end of Vancouver island a few years ago. I wonder if the minister would expand on the understanding which the department has in respect of insecticides, and generally as to whether or not any progress has been made in discovering or developing insecticides for treating or spraying which are not injurious to fish?

We have, of course, in British Columbia a continuing and major problem affecting fisheries, and that is the relationship between the hydroelectric development and the fishing on the rivers, I would think specifically on the Fraser river. I understand that General McNaughton and his counterpart in the United States either have made or about to make in the next day or two some announcement in respect of the development of the Columbia river.

I do not know whether or not the minister is familiar with the negotiations which have been going on. However, I believe the plan to divert the Columbia into the Fraser has been pretty well abandoned. What additional progress has been made in the research end of the study in an attempt to ensure that fish rivers are capable of being maintained, despite the hydroelectric development that is taking place on those same rivers?

Hon. Mr. MACLEAN (*Queens*): I think perhaps we might answer these questions serially, beginning with the first one in respect of the Qualicum river. I think it would be more satisfactory to the committee if some of the officials gave detailed answers on this. I could give you some information in a general way, but I think our time would be better used if we had one of my officials reply to that question; or if you prefer, we could leave it until the item comes up at which time we would give a more detailed reply.

Mr. HOWARD: That would be all right. I only raised it because you did, sir.

Hon. Mr. MACLEAN (*Queens*): Your second point was in respect of the spruce budworm spraying. Here again I do not pretend to be an expert; but I can give you some general information. It has been generally felt, and I think proven, that the spraying program in northern New Brunswick and in part of Quebec has been very successful and that its objective has been pretty well achieved. It would seem so for the time being in any case. It is and always has been recognized that these spraying programs have a detrimental effect both directly and indirectly on fish populations in the area. However, it is also recognized that until such time as some better method may be developed the spraying program is the lesser of two evils, even from the point of view of the fisheries only.

If the spraying program is not carried out, forest cover is destroyed and when forest cover is destroyed the fish go down the drain anyway. So if the forests are not protected you will not have any environment in which fish can live in any case.

I might add that there is an interdepartmental committee working on this problem of fish and insecticides and the methods of dealing with epidemics of insects of various kinds in ways which will cause a minimum of harm to the other forms of life in the area.

Perhaps my deputy minister would like to add something to that, or perhaps he might like to call on one of the other officials.

Mr. G. R. CLARK (*Deputy Minister, Department of Fisheries*): Mr. Chairman, I am not too sure if Mr. Howard was agreeable to leaving these questions which he has asked until the individual items are reached.

Mr. HOWARD: If you would indicate, first of all, which item?

Mr. CLARK: It would be under the fish culture item in the conservation and development service. This would hold true in respect of the Qualicum river, the matter of hydroelectric power development and dams in respect of fish.

Following up what the minister mentioned concerning the spruce budworm spraying, as Mr. Howard pointed out, there was spraying done in the northern part of Vancouver island. We have been keeping a very close check on it in order to decide whether or not there were any bad effects on the fisheries. The present insecticides which are being used certainly do cause harm to the fish entering the streams and the spawning areas.

As the minister stated, there is an inter-departmental committee composed of ourselves, the fisheries research board, and the Department of Agriculture, working on the problem of attempting to develop an insecticide which will be less harmful. We hope the scientists will be able to come up with something which will not harm fish life. At the present time attempts are being made to produce such an insecticide. The latest reports from British Columbia are to the effect that the epidemic of the spruce budworm seems to be petering out, the same as it has in New Brunswick.

Mr. HOWARD: May I put one other question? You mentioned the inter-departmental committee as between yourselves and the Department of Agriculture. The provincial authorities are also engaged in this.

Mr. CLARK: They are brought into the picture as well.

The CHAIRMAN: Are there any questions?

Gentlemen, we will start with the first item.

GENERAL SERVICES

127. Departmental Administration \$ 398,000

Mr. HOWARD: I have a pet peeve which I have been trying to develop for a little while here. It relates not only to your department but also to every other department. I mentioned it the other day in the house on another series of estimates. I wonder if the minister would make known his views on this to the committee and more particularly to the Minister of Finance who, I understand, applies for the printing of this estimate book, and it would be appreciated by myself and, I am sure, by all other members too if we could have an indication in the second part of the book, namely, where the details are listed, as to what the vote number is. We find it very difficult sometimes, looking in the details and referring back to the first part of the book, to find the relevant part in the details of the particular vote we are discussing.

Hon. Mr. MACLEAN (*Queens*): I think this is a point that is well taken. As a matter of fact it is one that I used to complain about myself when I was in the opposition. The present method has been in effect for quite some time. There is a tendency, naturally, to follow tradition and it is hard for people to change. But, frankly, I see no objection to the suggestion Mr. Howard makes. I think it is a point that should be given careful consideration.

There may be some reason, but I cannot imagine what it would be, why this would not be practical. I think it is probably due to the fact that the people who are concerned with compiling the estimates are so thoroughly familiar with the subject themselves that they cannot understand why a member of parliament might get lost in the book. I think it is a point that is well taken and I will certainly be very pleased to refer your observations to the Department of Finance for its consideration.

The CHAIRMAN: Are there any other questions on item 127? Shall item 127 carry?

Item agreed to.

GENERAL SERVICES

128. Information and Educational Service, including Grant of \$3,000 to Nova Scotia Fisheries Exhibition 184,000

Mr. ROBICHAUD: Item 128, Mr. Chairman, covers the information and educational service of the department. I note in the details on page 196 that there is an appropriation of \$51,600 for exhibits, advertising, films, broadcasting and displays. Could we have further details on this particular item?

Hon. Mr. MACLEAN (*Queens*): This is item 128?

Mr. ROBICHAUD: That is right. The details are on page 196, and there is a sum of \$51,600 within this item which is stated to be for exhibits, advertising, films, broadcasting and displays.

Hon. Mr. MACLEAN (*Queens*): Where is that on page 196?

Mr. ROBICHAUD: It is page 196, number 10.

Mr. MACLEAN (*Queens*): I think I will ask Mr. Clark, the deputy minister, to give you a detailed explanation of this.

Mr. CLARK: Mr. Chairman, this particular item of \$51,600 which is referred to is to provide under the department's information and educational service for the costs of moving pictures, film strips, still photographs, displays, advertising, commercial art services, photographic supplies, processing of films, engravings and maps. These are the items making up this amount of money.

There is a decrease as the result of a reduction in our film program which we were not in a position, with the script and the shooting program, to proceed with in 1959-60.

Mr. ROBICHAUD: Does this include the moving pictures which have been prepared on lobster fishing?

Mr. CLARK: Yes, it does.

Mr. ROBICHAUD: Mr. Chairman, could we have detail showing where these pictures have been shown during the present fiscal year?

Mr. CLARK: That can be readily obtained. I do not have it available today but the information can be made available to the committee.

Mr. ROBICHAUD: My reason for asking this is following certain remarks I made in the house on a previous occasion. One of the officials of the department has, I understand, made certain statements or given certain information to the press. According to this information the department had been very active during the present year and in previous years in having special meetings in communities where lobster fishing takes place, and it was stated that in regard to such meetings the assistance of the clergy and others had been requested. I think this committee would be very interested in having a complete report on those activities.

I know that in my constituency we have as many lobster fishermen—maybe not quite the largest number—as anywhere in the Atlantic provinces, and I understand that in 1953 or 1954 the department held one or two meetings with the lobster fishermen in order to explain to them the advantage of lobster conservation. I am given to understand that no further meetings were held until probably a very recent date.

Again, I want to stress to the department the importance of this educational movement. This is an item which has to do with information and educational service, and I think this is the proper time to bring this up. If we want to preserve our lobster fisheries, the department must once and for all decide that it will undertake a much more extensive educational program. I am behind the department 100 per cent in regard to the enforcement of fishery laws and regulations, and it is unfortunate that the department was faced with those unfortunate incidents which happened last summer. But, nevertheless, much more effective and better results could be obtained if this educational program were undertaken for the lobster fishermen; and again I urge the minister to give this matter the most serious consideration.

Hon. Mr. MACLEAN (*Queens*): Mr. Chairman, I am grateful to Mr. Robichaud for his remarks in this connection. I might say that in the department I think we realize fully, or nearly fully, anyway, the importance of the educational aspect of conservation as far as all types of fish are concerned.

This is probably especially important as far as the lobster fishery is concerned, because there is a tendency to take the attitude that there are as big fish in the sea as ever were caught, that the source of supply is inexhaustible, that lobsters migrate great distances and there is no use saving them in one area for someone to catch them in some other area.

Our scientists have found, of course, that this is not the case, that lobsters migrate only very short distances and that the supply of lobsters in an area can be very quickly depleted.

We have, as Mr. Robichaud has said, made films on this subject, and we are showing them pretty continuously. But I appreciate his remarks and I will try to see that the program is increased in his area, because I agree entirely with what he said, that the greatest asset to enforcement of any regulation is a full knowledge of the necessity for it. It is one of the basic principles of law enforcement of any kind that it is impossible to enforce any kind of law or regulation which is generally rejected by the majority of the population. The regulations are sound, generally speaking. There are places where perhaps they can be improved as we gain more knowledge; but, generally speaking, they are sound.

Therefore, the point is well taken, that enforcement will become much easier from a policing point of view when the people engaged in the industry understand thoroughly the necessity for the regulations.

I might say that we in the department are trying, not only from the strictly educational point of view, to make the fishermen more aware of the necessity for good conservation practices. It is my endeavour to try to have the fishermen realize that our enforcement officers are not police officers in the worst sense of that term, but rather well informed persons who are working in the interests of the fishermen themselves.

It is our belief that when the people engaged in the industry have a thorough knowledge of the necessity for conservation, enforcement as such will gradually become easier. I have taken a note of your comments, Mr. Robichaud, regarding the speeding up or increase in meetings where films and other educational media are used to try to create as much understanding on the part of the industry as is possible.

Of course, we find there are difficulties in this regard, although we are not discouraged by them. We do find, when we engage in these programs, it is the people who need the information most who are less likely to come and try to gain it. It is the people who are alive already to the importance of conservation who want to learn more about it, and it is the people who are less informed who are less likely to even want to be informed and to gain more information on the subject.

MR. ROBICHAUD: I wish to thank the minister for the attitude he is taking as far as this request is concerned, and I would like to impress one more point on him. The minister must realize that lobster fishing in the maritime provinces, especially in eastern New Brunswick is not limited but is taking place in areas which are predominantly French speaking. I would ask that the minister give further consideration to what has been done so far in the field of education on this subject.

I think he will realize that there might be a necessity to get outside assistance—I mean, outside of the department—and in fact it might be more effective because it would not be the officers of the department who would be involved in this educational program. As I mentioned before in the house, there could even be an educational movement from St. Francis Xavier University or Sacred Heart University. If those people were involved in this educational program they would be able to make themselves more easily understood by the people they are addressing.

I would suggest to the minister that consideration be given to obtaining outside assistance with, let us say, a program of two or three years, and then I am confident that the results will prove satisfactory, to the advantage of the minister, the department and the industry.

Mr. MACLEAN (*Queens*): Mr. Chairman, I am grateful for these observations. I might just say in passing—and I agree with what has been said—that if we find this necessary, we will not hesitate to take any reasonable steps to achieve the desired end.

In this connection I wish to make it clear—although I think it is understood—that we do receive excellent co-operation from St. Francis Xavier University and other institutions of this sort, and we do use their means of bringing knowledge to those engaged in the lobster fishery. But there may be room for improvement.

Item agreed to.

129. Economics service	\$ 327,600
130. Industrial development service	\$ 746,365

Mr. ROBICHAUD: In respect of items 129 and 130 I understand they are two services closely related. Could the minister or his deputy give us some detail of the operation of this division?

Hon. Mr. MACLEAN: I will ask my deputy minister to give you some detail on this.

Mr. CLARK: Mr. Chairman, item 129 is the economic service of the department. This service in the department is part of the responsibility of the federal fisheries administration. It covers analyses and interpretations of the facts relating to the economics of the Canadian fishing industry. The operations of this service of the department range from collection of current information on product sales and prices to detailed studies of factors affecting demand, cost and so on. The duties of the officers in this particular service of the department include field investigations in the coastal areas, production of reports, and attendance at meetings of the department. They are also engaged on various interdepartmental committees and with the industry. One of the important functions of the service is to develop and collect statistics of the fisheries for use by the administrators in the department, the fisheries research scientists and the industry generally. That in a brief way covers the economic service of the department.

Mr. ROBICHAUD: Thank you. I notice there is an item of \$314,000 for technical services to fishermen in the fishing industry. This represents an increase of roughly \$62,000 over last year. Could Mr. Clark explain to us the reason for this increase and what it will cover?

Mr. CLARK: I presume Mr. Robichaud is now referring to item 130, which is the industrial development service.

Mr. ROBICHAUD: Yes. The question was on both.

Mr. CLARK: I appreciate that. I was attempting to explain them as separate services.

The industrial development service is the service of the department for the over-all development, modernization and improved efficiency in all phases of the fishing industry, with the primary objective of helping the fishermen.

In the allocation of these funds provision is made to cover investigation, research, experiments and demonstrations to aid and supplement the efforts of the industry itself. Among these various projects to which the hon. member referred is the direct aid to the fishermen. These projects include a number of items, but chiefly will be concerned with demonstrations of fishing techniques and gear. For example, we had a project started last year,

to be continued in the coming fiscal year, concerning the catching of herring by a mid-water trawl. This is one of the types of things in which we are engaged which affects and is for the benefit of the fishermen. Fishermen and fishing boats will be employed in the carrying out of this demonstration; so there are actually fishermen themselves engaged in this project.

Mr. ROBICHAUD: Does this cover the operation of the "J. J. Cowie"?

Mr. CLARK: No, sir.

Mr. CROUSE: Does it cover the effect the present subsidies are having on fishing draggers of up to 65 feet in length?

Mr. CLARK: It does under vote 129.

Mr. CROUSE: For example, it has been my impression that the subsidy arrangements at present are only paid on ships constructed up to 65 feet in length, and that is the ceiling. It would appear from information I have received that 65 feet for fishing draggers on the east coast should be the floor and not the ceiling. The maximum length should be up to 125 feet. I realize the department has these facts and I wonder if any conclusion has been reached in respect of raising the subsidy and having it paid to larger fishing draggers?

Mr. ROBICHAUD: Before this is answered I would take exception to the suggestion that 65 feet should be the minimum. Along our shores the fishermen are interested in much smaller boats which are already covered in this subsidy. I am sure we do not want those boats to be excluded.

Mr. CROUSE: I will qualify my remarks to the effect that the present subsidy should be extended not only to ships of up to 65 feet but also to larger draggers where it is warranted.

Mr. ROBICHAUD: I agree.

Hon. Mr. MACLEAN (*Queens*): There is a complete review of the whole subject of subsidization of fishing vessels under study at the present time. No conclusions have as yet been reached. When they are, an announcement will be made and it will be made known to the industry. There are a number of factors to be considered fully including the economic factors which Mr. Crouse has raised. I do not think there is anything further I can say at the moment, except that we are, I think, in possession of all the relevant information in respect of the efficiency of the various sizes and types of vessels.

Mr. GRANGER: I would like to have the opportunity of saying one word. The long-liner is essential for fishing in my province and the subsidy is quite essential. I would like to mention the possibility of having a revival of the Labrador floating industry. As you know, for many years the Labrador fishery was a very important part of Newfoundland's fishing activities. The boats which prosecute that fishery would be of a much larger type than those presently subsidized. There seems to be good reason to believe that this fishery could be revived. I am quite sure the minister has that in mind when it comes to the question of subsidies for larger vessels.

Hon. Mr. MACLEAN (*Queens*): I might say in this regard that the study to which I have referred includes all types of fishing vessels right across the country. The point Mr. Granger has raised will certainly be considered.

Mr. GRANGER: Thank you, sir.

Mr. ROBICHAUD: I think last year in this committee recommendations were made to the effect that this subsidy be increased from \$165 to \$275 a gross ton. I would appreciate if the minister would tell us now if this matter is receiving consideration.

Hon. Mr. MACLEAN (*Queens*): Yes. This is part of the whole problem, not only the size of the vessels but also the rate of the subsidy.

Mr. LEGERE: Would the technical services studies include the metal trapping experiment which is presently going on?

Hon. Mr. MACLEAN (*Queens*): Yes.

Mr. LEGERE: Could I have a report as to the effectiveness of this?

Mr. CLARK: As the committee probably knows the experiment with metal lobster traps has been going on for the past few years. The idea conceived originally was to devise a lobster trap which would withstand the storms and prove able to stand up to the damage sustained by an ordinary wooden trap.

We were able to interest some of the steel and aluminum fabricators in Canada in developing a trap. A number of these traps have been developed and have been placed in operation on an experimental basis. The traps which have been in operation have been quite successful and stand up to the storm damage. The fishermen who have been using them on this experimental basis have found them to be very efficient.

Mr. LEGERE: Could you possibly tell me what would be the cost if they were universally accepted? What would be the production cost of this trap to the fishermen?

Mr. CLARK: I do not think that the fabricators have come up with any real cost because it has developed as between the different fabricators of these metal traps into a competition as to whether they will be aluminum, steel, or some other kind of metal. They have not really as yet come up with a price which would be on a commercial basis.

Mr. LEGERE: I have heard rumours to the effect that the vibration of the metal in the water is conducive to the fact that this trap does not fish as well as a wooden one. Would that be so? I know there are experiments going on to that effect.

Mr. CLARK: I am afraid I cannot answer that. We have heard these same stories, but other fishermen say they are equally as if not more efficient than the ordinary traps. As yet, I do not think there is any scientific basis.

Items 121 and 130 agreed to.

The CHAIRMAN: It is eleven o'clock. The committee stands adjourned at the call of the chair.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MARINE AND FISHERIES

Chairman: ROLAND L. ENGLISH, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 2

Main Estimates (1960)—Department of Fisheries

THURSDAY, APRIL 9, 1959



WITNESS:

Mr. G. R. Clark, Deputy Minister, Department of Fisheries.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

STANDING COMMITTEE
ON
MARINE AND FISHERIES

Chairman: Roland L. English, Esq.

Vice-Chairman: Albert DeB. McPhillips, Esq.

Messrs.:

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Batten	Keays	Noble
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Carter	MacLellan	Pickersgill
Crouse	Matthews	Robichaud
Danforth	McGrath	Speakman
Drysdale	McLennan	Stefanson
Gillet	McQuillan	Stewart
Granger	McWilliam	Tucker—35.
Grenier	Michaud	
	Morris	

(Quorum 10)

Antonio Plouffe,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, April 9, 1959.

(3)

The Standing Committee on Marine and Fisheries met this day at 11.00 o'clock a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Batten, Browne (*Vancouver-Kingsway*), Carter, Crouse, Danforth, Drysdale, English, Grenier, Howard, Keays, Legere, Macdonald (*Kings*), MacLellan, Matthews, McLennan, McQuillan, McWilliam, Noble, O'Leary, Phillips, Pickersgill, Robichaud, Stefanson, Stewart and Tucker.—(25).

In attendance: From the Department of Fisheries: Messrs. G. R. Clark, Deputy Minister; S. V. Ozere, Assistant Deputy Minister; Dr. W. M. Sprules, Special Assistant to the Deputy Minister; Dr. J. L. Kask, Chairman, Fisheries Research Board; Mr. J. J. Lamb, Director, Administrative Service; Dr. A. L. Pritchard, Director, Conservation and Development Service; Messrs. H. V. Dempsey, Director, Inspection and Consumer Service; H. C. L. Ransom, Executive Director, Fisheries Prices Support Board; W. C. MacKenzie, Director, Economics Service; L. S. Bradbury, Director, Industrial Development Service; T. H. Turner, Director, Information and Educational Service; E. B. Young, Assistant Director, Conservation and Development Service; J. G. Carton, Departmental Solicitor; J. A. Albert, Chief, Financial and Stores Branch; W. R. Hourston, Chief, Fish Culture, Development Branch; R. Hart and W. Snaith, Industrial Development Service; H. A. Wilson, Fisheries Research Board; and Mr. O. C. Young, Assistant Chairman, Fisheries Research Board.

The Chairman presented the Second Report of the Sub-Committee on Agenda and Procedure dated Wednesday, April 8, as follows:

Your sub-committee met on Wednesday, April 8, in the Chairman's office. Messrs. Browne, Howard and Legere were present.

After discussion, on the suggestion of Mr. Howard in regard to a preliminary report on flood control, etc. in the Fraser River Basin, it was agreed and your sub-committee recommends:

That the Committee continue its study of the second group of Estimates referred, namely, 131 to 135 inclusive, and that Items 131 and 132—Field Services—be allowed to stand with a view to permitting a study of the portion of the said preliminary report insofar as it deals with Fisheries.

The said Report was concurred in.

The Minister expressed his regret for not being able to remain as he had to attend a Cabinet meeting.

The Committee resumed from March 20 its consideration of the Main Estimates of the Department of Fisheries.

Items 131 to 135—Field Services—were called and the Deputy Minister of Fisheries, Mr. G. R. Clark, was examined.

Dr. A. L. Pritchard supplied some answers to the Committee on the survival of transplanted oysters.

At the opening of the meeting reference was made to Supplementary Estimates 2 and 3. The Committee gave its consent to delete from the records any reference to the said Supplementary Estimates which have not been referred to the Committee by the House.

Items 133, 134 and 135 were carried.

In accordance with the recommendation contained in the Second Report of the Steering Committee, Items 131 and 132 were allowed to stand.

At 12.30 o'clock the Committee adjourned until Friday, April 10, at 9.30 o'clock a.m.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

EVIDENCE

THURSDAY, April 9, 1959.

Hon. J. ANGUS MACLEAN (*Minister of Fisheries*): Gentlemen, before the meeting comes to order I should like to apologize for not being able to stay at this morning's meeting because there is a cabinet meeting in progress which requires my attendance. I excused myself from that meeting so that I could come here to express my regrets that I will have to be absent for at least the first part of your meeting and, I think, probably all of it. However, the officials are here to answer any questions you may have. If the committee is agreeable, I will answer any questions which may involve policy at the next meeting.

The CHAIRMAN: Gentlemen, I see we have a quorum. Will you come to order, please. We had a meeting of the steering committee at 2 o'clock on Wednesday in my office. I will now ask the Clerk of the Committee to read this report.

—(See to-day's minutes of proceedings).

Mr. DRYSDALE: Are we skipping items 131 and 132 entirely at this time?

The CHAIRMAN: Not entirely. We will now study the second group—items 131 to 135 inclusive—

FIELD SERVICES

131 Field Services Administration	870,710
Conservation and Development Service—	
132 Operation and Maintenance (including the former Destruction of Harbour and Gray Seals)	5,532,452
133 Construction or Acquisition of Buildings, Works, Land and Equipment	1,657,900
134 Inspection and Consumer Service	1,794,705
135 Fishermen's Indemnity Plan Administration	236,000

Mr. ROBICHAUD: At the last meeting I asked a question in regard to the showing of films on lobster conservation, and whether we could have a list of the different places these films were shown. Perhaps this question could be answered now before we proceed with the other items.

Mr. G. R. CLARK (*Deputy Minister, Department of Fisheries*): Mr. Chairman, Mr. Robichaud did ask that question at the last meeting and I regret to say, after checking into our records, that we do not keep a record of the number of showings of lobster films and film strips in the maritime areas by departmental personnel. However, I can give some information on this, Mr. Chairman. The National Film Board has provided us with the number of screenings of the film "Lobsters are a Community Affair" from 1955 through to March 1958. The number of screenings by the National Film Board of this lobster film is as follows: in the English version there were 62 showings in New Brunswick, 77 in Nova Scotia, 35 in Prince Edward Island and 31 in Newfoundland, for a total of 205 showings. In the French version, over the same period, there were 47 showings in New Brunswick and 16 in Nova Scotia, for a total of 63.

Mr. BATTEN: Could I ask a question in regard to the showings in Newfoundland. Were these films shown in areas where lobsters are fished or in some other area?

Mr. CLARK: In so far as the National Film Board showings which I referred to, they would be presumably in the areas or in communities where there are proper facilities. But in our own case we have portable units, and departmental personnel show the film and film strips in the lobster areas to which you refer.

Mr. BATTEN: The reason I asked that question is that there is a certain section of the coast where there are no facilities for showing films; they have to carry the field unit with them. I was wondering what showings had been made in that area.

Mr. CLARK: That is what we do. We have portable units and the fishery officer carries the equipment with him in order to show films in areas where there are no other facilities.

Mr. ROBICHAUD: Has the department any record of the public meetings held by officers of the department on lobster conservation in different lobster producing areas?

Mr. CLARK: I do not have a record as to the number of meetings, but there are constantly or from time to time meetings by the fishery officers with lobster fishermen and others interested in all of the fishing areas. It might be of interest to know as well, Mr. Chairman, that we are very much aware of the value of educational work among the fishermen. I might say that since last year a total of about 45,000 copies of the department's illustrated booklet "Canada's Lobster Fishery" have been issued among the English and French-speaking lobster fishermen, as well as distribution to the provincial educational authorities. A second printing of this booklet has been necessary. The total number printed to date is 50,000 copies in English and 17,000 in French. Distribution was made to the fishermen when they purchased their lobster fishing licences.

Mr. BROWNE (*Vancouver-Kingsway*): I would like to raise a question which I brought up last year concerning conservation measures taken on the west coast, as they relate to the fishermen out there. I have felt for some time that some attention has to be given in regard to the restriction of the number of fishing licences issued. I asked last year whether consideration had been given to this and I was informed there was a study to be made to see if such a course was necessary. Due to the restrictions that are being put on and the fact that less and less fishing time is being allowed each year, I feel it is going to become more and more difficult for a full-time fisherman to make a living and that consideration will have to be given to eliminating some of the part-time ones. Has any study been made or is there going to be one made?

Mr. CLARK: Yes, this is quite a serious problem, as has been pointed out. Last year we began the study by looking into the whole situation in so far as the number of salmon and halibut fishermen were concerned. That particular study went on last year for two or three months and is to be resumed within the next month or so in order that we can cover the entire season. We are giving particular attention to this and will attempt to come up with some recommendations which can be given to the minister in regard to the number of commercial fishing licences.

Mr. BROWNE (*Vancouver-Kingsway*): There is one other matter which I think is very closely associated with this and along the same line; that is the question of the twelve-mile limit that was discussed last year at the international conference. I wonder if we could be brought up to date on the situation. Have there been any further international undertakings in regard to this, or any sign of any coming up?

Mr. CLARK: If I may say so, I am afraid I am not in a position to answer your question. It is one which should be more properly addressed to the Department of External Affairs, because that department is coordinating all

of the Canadian views on this subject in so far as the government is concerned. The problem involves not only fisheries, but customs and other matters as well. I regret that I am not in a position to answer your question.

Mr. BROWNE (*Vancouver-Kingsway*): I will finish with one more question. I am not sure whether I am in the right place, but I would like to inquire about the dogfish killing program. How much of the money allocated last year was spent on this program and what are the plans for this year? I do not believe that this particular subject is covered in any item and I think it is most important that some program should be carried on.

Mr. CLARK: In the department's estimates last year there was an item of \$250,000 for this purpose regarding the destruction of dogfish on the Pacific coast. We finally developed a program, but it was quite late in the year. The government agreed to pay a bonus of 10 cents a pound on dogfish livers delivered to the processing plants. Then we chartered five vessels to carry out the catching and destruction program. The charters were based on a daily rate plus an incentive bonus. Up to the present time this method has not proved too successful in attempting to destroy the dogfish. It may be that the season of the year was wrong for some of the areas. We anticipate having further discussions with the industry on the Pacific coast within the next few weeks and in that way a recommendation could be made to the minister and consideration might be given to further funds by way of a supplementary. However, that will have to be considered later.

Mr. BROWNE (*Vancouver-Kingsway*): At the moment, there is no plan for any program of any nature this year.

Mr. CLARK: Technically that is correct at the moment, because the vote lapsed on March 31.

Mr. BROWNE (*Vancouver-Kingsway*): How much money was actually expended under the program and what happened to the money, if any, that was left over?

Mr. CLARK: Although I have not the final figures, out of the \$250,000 up until March 31 it would be in the order of between \$50,000 and \$75,000, but the balance of the money would have lapsed as of March 31.

Mr. LEGERE: While we are on the subject of conservation, I have noticed that literature educating the fishermen, particularly in the lobster field, not to destroy the small or illegal ones, was distributed last year. If I am correct, the largest number of convictions were registered last year by the department. This leads me to say that education is not a cure-all for this poaching or eating of illegal lobster. I would suggest that the penalty be made more strict. You are educated about alcohol with all its ill-effects, but nature has to take her part and advise you when to stop drinking. It is similar to the liking that humanity has for forbidden fruit. You can advise the fishermen as much as you like what they are going to lose, but some will go on eating and destroying them. I think the only solution to that problem would be to make the penalty stiffer.

I would like to relate a case that happened a few years ago on the coast of Maine in the United States. At that time a fisherman had been caught the first time and given a stiff warning; the second time they caught him with illegal lobster they fined him \$100 and the third time they took his licence away for five years and fined him \$3,500. That has stopped the illegal fishing in Maine to a great extent, and I personally think from observation and experience that the only way we are going to cope with this is to make the penalty stiffer.

The CHAIRMAN: Do you wish to answer that question, Mr. Clark?

Mr. CLARK: I do not think, Mr. Chairman, it was in the nature of a question. However, I am sure that Mr. Legere's views will be welcomed by the minister.

Mr. DRYSDALE: On the question of conservation, I was interested in reading in a newspaper fairly recently where there were over fifty Soviet trawlers off the coast of Alaska, near Bristol Bay, apparently going after bottom fish. In that particular area there is also the halibut grounds of the North Pacific. I was wondering, sir, what steps Canada was taking with regard to perhaps contacting the Soviet Union with a view to establishing some conservation in connection with this very important fishing industry. I was also wondering whether there had been any talks with the Soviet Union on the question of salmon fishing, because it is useless if we concentrate on this matter just in so far as Japan, the United States and Canada are concerned while the Soviet Union is perhaps free to go in and exploit or utilize the halibut fishery to any extent they wish. Have you any comments to make on this subject, Mr. Clark?

Mr. CLARK: We too have seen the press reports and have some information in regard to the Soviet trawler fleet moving into the Bering Sea. The number of vessels reported to us is approximately fifty, and from the information we have some of them are quite large. According to the information we have received to date the Soviet fleet is after the flat, ground, or bottom fish, as described by Mr. Drysdale. So far as we know they have not taken any halibut up to the present time. However, this does not mean to say that they could not take halibut. They are quite far out in the Bering Sea. One of the last reports gave the information they were just off the Pribilof islands, which is quite far removed from Bristol Bay itself. We are attempting to obtain all the information we possibly can, and when it is obtained it will be presented to the minister and to the government for whatever action may be deemed necessary.

Mr. DRYSDALE: But at the present time there has been no action taken with regard to the Soviet Union on this question of the halibut or any other type of fishing.

Mr. CLARK: Not to my knowledge.

Mr. PHILLIPS: I would like to comment on Mr. Legere's remarks concerning the educational value of the films in preventing poaching. I agree that a certain amount of increased prosecutions must take place, but I also feel the department should take more steps to inspect the plants and also the wholesalers. I feel the fisherman will not poach if he has not a market for his fish. He has to obtain his market through the packer and wholesaler. I think there should be more attention paid to the inspection of the plants in order to make sure illegal lobsters are not being passed.

Mr. HOWARD: I wonder if before I go into the aspects that come under these votes, whether we could be advised of the charter rates for the boats used in the dogfish control program as they compare with similar sized boats chartered for fisheries patrol purposes; could we obtain that comparison? I appreciate the fact it would be on a general basis due to the fact the boats are not exactly the same size.

Mr. CLARK: In answer to the question in regard to the dogfish destruction operation the basic charter rates of the vessels we did charter ranged from \$75 to \$200 a day, depending on the size of the vessel. Also under the scheme there was a bonus of \$6 a ton on the first 300 tons caught and \$15 a ton on the next 400 tons in excess of the basic 300 tons. I do not think there could be a comparison with the vessels we charter for patrol purposes, because the ones that do patrol are small vessels.

Mr. HOWARD: I have one or two other matters I wish to bring up. The other day when the committee had its first meeting, I raised two or three questions arising out of the minister's remarks, and at that time it was suggested they might more properly come under these items. Would it be possible, without rephrasing the questions put on that occasion, other than to say they dealt with the use of insecticides or airplane spraying for spruce budworm and the like, to deal with the question of conservation in the Qualicum river, and the fisheries question on the Fraser river? Perhaps now we might be in a position later on to study the report of the Fraser river board as it relates to fisheries there. It might be advisable to allow my question in regard to that subject to stand over until we have an opportunity to go into it more extensively. I would appreciate a reply to my other two questions.

Mr. CLARK: We did review for you the matter of the insecticide spraying, but I can give you some other additional information, if you would like it.

In January, 1958, after heavy and widespread spraying against spruce budworm in New Brunswick and more localized efforts to eradicate the black-headed budworm on Vancouver island, a meeting was called in Ottawa to discuss the problem. Present were representatives of the Department of Agriculture, Northern Affairs and National Resources and Fisheries, including the fisheries research board of Canada, the New Brunswick Department of Lands and Mines, the Quebec Department of Lands, Forests and Fisheries, the Quebec Forest Industries Association, Forest Protection Limited, the B.C. pest control committee and the B.C. Loggers Association. So there was quite a cross-section represented from the areas where the spruce budworm had become an epidemic.

It was recommended from this meeting that an inter-departmental committee be formed in Ottawa to ensure periodic review of problems of interest and of research needs as well as to arrange for the distribution of pertinent information. This committee is now active under the chairmanship of Dr. M. L. Prebble of the Department of Agriculture with representatives from the Department of Fisheries, Northern Affairs and National Resources and the fisheries research board of Canada.

Last year the Department of Agriculture and the fisheries research board, with the co-operation of Forest Protection Limited, carried out joint laboratory tests, to discover, if possible, an insecticide equally efficient to D.D.T. in controlling spruce budworm, yet less damaging to fish. Bio-assay tests showed that the effect on fish was in the following order D.D.T., D.D.D.; another called Korlan, and one called Sevin. The effectiveness on the budworm was in the same order. In the field tests, it was discovered that D.D.T. in concentration of one-quarter pound per gallon, per acre, showed no significant mortality on Atlantic salmon smolts and good results in controlling budworm. This seemed a worth while lead which was to be tested in 1959. But I think, and perhaps the members of the committee are already aware, the spruce budworm epidemic in New Brunswick has apparently collapsed, as has the black-headed budworm infestation in British Columbia. So the difficulty in 1959 is to find an area where field tests may be carried out. We hope the epidemics on both coasts have now collapsed and that we will not have the problem for the time being.

Mr. HOWARD: I hope you do not hope they return again so you can carry out your tests.

Mr. CLARK: That is correct.

Mr. MCQUILLAN: They undoubtedly will return again.

The CHAIRMAN: Do you have a question, Mr. McQuillan?

Mr. McQUILLAN: I was going to raise the same question that Mr. Howard did, in regard to the Qualicum river conservation.

Mr. CLARK: The second question Mr. Howard asked at the last meeting was in regard to the Qualicum river project. It is very typical of the majority of coastal streams in British Columbia in which there are generally fall freshets in November and early December and a spring freshet in April and May. The period of minimum flow usually falls in the latter part of August and September.

The various species of salmon spawn in these rivers in September and October and even into December. They hatch in the early spring and leave the gravel in April and May. Some species, such as the coho and spring, remain in the river for one year.

The success of the natural propagation of salmon in such rivers depends almost completely on whether favourable water conditions occur in the critical periods in the life history. For instance, extremely heavy freshets in the fall may wash out newly deposited eggs. Dry weather in April and May may make it impossible for the young fish to leave the gravel or the river. Fish may spawn on high bars in deep water and the eggs left stranded if the river dries out.

The work in connection with the Qualicum river project is designed mainly towards obtaining controlled water flow. The principal structure would be a storage dam in an appropriate place. In the case of the Qualicum, money has been placed in the estimates to investigate sites particularly the outlet of Horne Lake, which is the source of the river. During the year complete studies will be made of the discharge records to establish the amount of control required for discharges ranging from 30 cfs, to 2,000 cfs. The Horne Lake area will be surveyed to determine the amount of storage area and the size and type of dam required. Geological drilling will be done to establish a good dam site. The salmon runs will be checked to fix the present population sizes, location and extent of spawning areas, timing of the adult and juvenile migration and the size of the rearing areas. At the present time it is known that the Big Qualicum supports approximately 1,000 spring salmon, 3,000 to 5,000 coho salmon and 20,000 to 40,000 chum salmon; much smaller numbers than occurred in the early days and much smaller numbers than its potential could support.

Once water control is achieved, other methods will be tried, if necessary. These will include prepared spawning areas and perhaps the use of hatching facilities developed recently.

Mr. McQUILLAN: You are referring to the Big Qualicum?

Mr. CLARK: Yes.

Mr. HOWARD: I have one other matter which I would like to bring to the attention of the committee. This arises out of a newspaper clipping that was sent to me. Unfortunately, they did not indicate what paper it was from or the date. However, from looking at the ads in the back, it would appear to be from one of the Vancouver papers. If you have a knowledge of this, I think the text will be sufficient; you will not need the date of the paper and so on.

This article relates to some comments made by Professor Casimir Lindsey of the University of British Columbia with respect to the effect the Wenner-Gren plan to dam the Peace river might have on the salmon runs in the Fraser. And in quotation marks here he says that the proposed dam on the Peace river will let "voracious fish-eating pike" into the Fraser river system.

He goes on further and points out that pike are now held back by the continental divide, but that might not be so if this power project proceeds. He mentions the reasons why the pike are a menace, one being they carry a

tape-worm which can infect salmanoid fishes, resulting in a cyst in the flesh and making the fish unsaleable. He also says that pike devour fish, including the trout and salmon.

I wonder if the comments of Professor Lindsey have been made known to the department, whether he is correct in what he says, or partially correct. Have you any statement to make along these lines?

Mr. CLARK: I have not seen the particular clipping to which Mr. Howard refers. But the department and the fisheries research board are aware of this problem and are studying and taking full recognition of any development of this kind, and what effects it would have.

From my own knowledge, I would think that Professor Lindsey probably has quite a good point and there is a good deal of merit in what he says. We are watching it very carefully.

Mr. DRYSDALE: Mr. Chairman, going to the estimates I notice that there is the addition of seven new fisheries officers 6 and eight fisheries officers 4. I wonder if Mr. Clark could outline what their duties are and the reason for the increase.

Mr. CLARK: The explanation is that these are internal transfers, moving them from one vote to another. We moved some of the positions on the instructions of treasury board in order to get them into the proper vote, from the protection side of our operations into field service administration. These men, Mr. Chairman, are in what we refer to as district offices. There are district offices in British Columbia at Prince Rupert, Nanaimo, Victoria and Westminster; and the others are in the same capacity in district offices in Newfoundland. These district officers, at their grade, are supervisors of fishery officers, grades 1, 2 and 3 in the district in which they fall.

Mr. McQUILLAN: Mr. Clark, you spoke about the Qualicum river and the minister has previously made announcements about Robertson creek, near Great Central lake.

Do you anticipate that venture will be in time for the spawning run this year?

Mr. CLARK: Yes, we do. We are working on that program. In fact, the Robertson creek project was started this spring. We were able to have sufficient funds made available in the old fiscal year to get a start on it this winter.

Mr. McQUILLAN: Is that your first venture in a large artificial spawning ground in British Columbia?

Mr. CLARK: No. The first real experiment in the spawning grounds was at Jones creek.

Mr. McQUILLAN: With regard to the north end of Vancouver island I think there was an endeavour to save approximately 20 million feet of timber at that time. You say there were deleterious effects on the fish in that area. Can you get me some statistics later on that? I do not ask for them now; but could you get me some statistics later on that to substantiate your statement that there were losses?

Mr. CLARK: Yes, I think we could get information on that for the committee, Mr. Chairman.

Mr. McQUILLAN: I have one other question. We were talking a little while ago about lobster fishing on the east coast and, of course, I am referring to a better type of animal, the crab fishing on the west coast.

I am referring to a particular area on the west coast of Vancouver island which is rapidly coming into popularity as a tourist and camping resort, and will become more so when the roads shortly open up there on the west coast to Ucluelet and Tofino.

Do you have a limit—I do not want to make any facetious remarks here at all—on the sport fishing contained in that area.

Mr. CLARK: No, we do not have a “bag” limit, as it were, on crabs.

Mr. MCQUILLAN: The reason I mention that is to point out that I have noticed from personal observation that there is a good deal of waste going on there. I have seen people take as many as 150 in one day, and they go to waste. I think it is something that should be given consideration, because that is one of the best crab fishing areas on that coast.

Mr. HOWARD: Have you given any thought to changing the name of this particular species of shellfish?

Mr. MCQUILLAN: No, it will have to stand on its own.

Mr. CARTER: I have two questions, Mr. Chairman. Mr. Clark referred a moment ago to additional regional officers in Newfoundland, and I wondered if he could tell the committee how much progress has been made with this decentralization of the fishery service of Newfoundland under the new regional set-up?

Mr. CLARK: Yes, Mr. Chairman. These district officers are now in operation as of April 1.

Mr. CARTER: How many regions?

Mr. CLARK: Four regions, or districts.

Mr. CARTER: My second question is this. Has anything been done to explore the possibility of working out some sort of international agreement which would reserve in-shore fisheries for certain types of equipment? We have a problem in my riding where the draggers fish on our in-shore grounds, and these in-shore grounds are normally used by fishermen using hook and long line. When the foreign draggers come in over those grounds, they make it impossible for the shore fisherman to use the grounds because, in the first place, he is afraid to risk his gear in case the dragger takes it up and destroys it. After they have dragged over the grounds, it is not much use putting out long lines anyway. If we had some sort of agreement whereby everybody would use a standard type of equipment, that would solve the problem, I think.

I wondered if anything had been done along that line, to see what might be worked out in that way?

Mr. CLARK: The answer to Mr. Carter's question, Mr. Chairman, is “yes”, that we have had informal discussions, with the foreign trawler fleet which operates off the coast of Canada, and it is my intention in the next couple of months, when I will be seeing the representatives of the European countries who fish the northwest Atlantic, to have further discussions with them, looking towards some sort of agreement, if this is possible, in connection with this problem.

Mr. PICKERSGILL: It would be true, would it not, Mr. Clark, that if we could get the territorial limits increased, we would have a great deal more bargaining power?

Mr. CLARK: I think I should decline to comment, Mr. Chairman, because I think the question should be for the Department of External Affairs.

Mr. MACDONALD (*Kings*): Mr. Chairman, I should like to ask Mr. Clark if consideration has been given to a bounty on the dogfish program on the Atlantic coast. I have had several inquiries in regard to that.

Mr. CLARK: Mr. Chairman, the problem of the predatory dogfish on the Atlantic coast has been considered at the same time as we were considering the predator control of dogfish on the Pacific coast. But there are some differences on the Atlantic coast. There are quantities of dogfish on the Atlantic

coast, but they are not concentrated the way they are on the Pacific coast. In other words, they are very widely distributed and it is very difficult to get a kill on them.

Mr. MACDONALD (*Kings*): Has the department been asked to, or has it carried out any investigation as to the possible effects on fisheries in the Northumberland strait area if the Northumberland causeway was built?

Mr. CLARK: What little is known, Mr. Chairman, of the prospective development in that area, we have been keeping up with it and will be able to survey and investigate any effects so far as the fishery is concerned.

Mr. MACDONALD (*Kings*): It is being considered?

Mr. CLARK: Yes.

Mr. PICKERSGILL: Has the Canso causeway had any real effect on the fisheries, as far as conservation is concerned?

Mr. CLARK: Not from a conservation point of view, Mr. Chairman.

Mr. NOBLE: Mr. Chairman, does Mr. Clark, or the department, feel they are making satisfactory progress in the elimination of lampreys in the Great Lakes?

The CHAIRMAN: That comes in another item, a special group of items, 136.

Mr. NOBLE: I thought you were dealing with anything in the line of conservation.

The CHAIRMAN: It is the second group of items.

Mr. ROBICHAUD: Mr. Chairman, my question is a general one. If my memory serves me right, last year under the field services we had a special item under the title of "protection service". I notice this item does not appear this year. I do not have in front of me the estimates for 1958-59.

Can Mr. Clark tell us if there have been major changes in the administration of the department or in the policy of the department by taking out this special item for protection? Is it included in one of these?

Mr. CLARK: Mr. Chairman, this is purely a matter of administration in the preparation of the estimates. The item has not been taken out. It is found and covered under item 132 and comes under conservation and development service.

Mr. ROBICHAUD: But the name has been changed?

Mr. CLARK: No; the conservation and development service has been so named in the department for about 10 years.

Mr. ROBICHAUD: In the 1958-59 estimates, under field services—I have just been handed a copy—you have "protection branch, operation and maintenance", and other details.

Mr. CLARK: The explanation, Mr. Chairman, is that in the former method that was used, it was shown separately. But this is an amalgamation, and they are included in this item to which I referred.

Mr. ROBICHAUD: Was there any special reason for this change?

Mr. CLARK: It was only a matter of the way they wanted the estimates made up, sir.

Mr. DRYSDALE: I notice in the details of the field services there is an item for acquisition of equipment of some \$10,800, and there is another item under the same heading for acquisition of equipment, \$1,180,340.

I wonder if Mr. Clark could provide some details as to those two items, because I am interested in finding out the sort of items you have under acquisition of equipment.

Mr. CLARK: I presume, Mr. Chairman, Mr. Drysdale is referring first to item 131. Am I correct?

Mr. DRYSDALE: That is right.

Mr. CLARK: The acquisition of equipment—

Mr. DRYSDALE: Field services, under "Administration".

Mr. CLARK: Under item 131, Mr. Chairman, the item of \$10,800 is to provide for the replacement of cars in the various districts—there are some in the Newfoundland area—and the acquisition of vehicles for the use of district officers at Grand Bank, Bonavista and Curling.

Mr. DRYSDALE: What does it include under the other item?

Mr. CLARK: Under the other item—

Mr. DRYSDALE: \$1,180,340. I hope it is not automobiles too.

Mr. CLARK: The main item there, Mr. Chairman,—this is the operational side—is a replacement of vessels, particularly on the Atlantic coast. There is the *Cygnus* for which a new vessel is now being built.

It also provides for a variety of things in all areas throughout the country. In Newfoundland there is another vessel \$60,000, replacement—

Mr. DRYSDALE: What is the *Cygnus* worth?

Mr. CLARK: I think our tender was about \$1,100,000, if I recall correctly.

Mr. DRYSDALE: That is most of the item. I see.

Mr. KEAYS: Could we have a further elaboration on "Charter of aircraft"?

Mr. CLARK: The \$200,000 under the item of field services administration is for the charter of aircraft in the Newfoundland area, where the services are protection, inspection, fish culture, and indemnity. All the services use the aircraft. We have an arrangement—at least, we expect to—for the current fiscal year of chartering on an hourly or a daily basis for fixed-wing aircraft and helicopters.

Mr. KEAYS: Are the planes based in Newfoundland?

Mr. CLARK: Yes.

Mr. ROBICHAUD: Mr. Chairman, I understand we are now discussing all the items under field services, and amongst them is a substantial item of \$1,794,705 for "Inspection of consumer service".

I understand that under this service will come the voluntary inspection of fresh fish, which will be introduced this year. I am sure that all the members of the committee would be interested to have full details on the operation of this inspection. For example, will it be made at vessel level, or at plant level only? There seems to be some misunderstanding on this. Different statements have been made, and I think we should know at what level the inspection will take place.

Also, what arrangement has been made with the province of Quebec where the fisheries are under provincial jurisdiction?

Mr. CLARK: Mr. Chairman, there are two or three questions in the question, I think. First of all, the inspection of fresh and frozen fish and all other species of fish products is administered by the department under the Fish Inspection Act and the Meat and Canned Foods Act as it applies to fish and shellfish. There will be dockside inspection, followed through the plant to the finished product, under this inspection service, which came into operation on a voluntary basis under the Canadian government specifications board standards on April 1. Any fish processing plant which can qualify and meet the conditions laid down in the standards will qualify and be allowed to use the insignia "Canada inspected" or "Canada approved".

Mr. ROBICHAUD: On this subject could Mr. Clark tell us, without mentioning any names of companies, what percentage of the fish plants have qualified under this inspection?

Mr. CLARK: Mr. Chairman, up until a few days ago—and this scheme only came into effect on April 1—there have been, as far as I know, about six to eight plants which have been certified.

Mr. ROBICHAUD: Out of how many?

Mr. CLARK: Throughout Canada?—Thousands.

Mr. ROBICHAUD: On the east coast?

Mr. CLARK: I could not give you a figure offhand.

Mr. ROBICHAUD: Would the plant owner have to apply for this inspection, or is it made compulsory by the department?

Mr. CLARK: It is not compulsory; it is a voluntary scheme. He is under no compulsion to equip and conduct his operations under these standards; but if he does, and he meets the qualifications, then he will be certified.

Mr. PICKERSGILL: Is it voluntary rather than compulsory because there is some doubt about the jurisdiction of parliament in the matter?

Mr. CLARK: No, I do not think so. I do not think it is a question of jurisdiction at all.

Mr. PICKERSGILL: It is just a question of policy.

Mr. CARTER: Going back to conservation again, I was wondering whether there was any allocation in the estimates this year to replace these little boats used by the fishery patrols which patrol the river waters. There are three in my riding and all are in a very poor state of repair.

Mr. CLARK: In an item to which I think we just referred there were provisions in the amount of money in the conservation and development vote for construction of replacements in Newfoundland. There is one there that I know of offhand, sir.

Mr. CARTER: To replace these?

Mr. CLARK: Yes.

Mr. CARTER: And is there a program to place one each year? It seems to me that these boats should be replaced, when they are replaced, by boats that are more seaworthy than they are at the moment, and they should have twin engines for protection. These are flat-bottomed boats and they have no chance at all.

Mr. CLARK: From the department's point of view, that is the policy that we are attempting to follow, to have a replacement program over the years.

Mr. CARTER: What do you plan to do with the *Cygnus*? Is she to be retired?

Mr. CLARK: The present *Cygnus* will be decommissioned and turned over to crown assets.

Mr. CARTER: How old is she?

Mr. CLARK: She was built during the war years as a minesweeper.

Mr. CROUSE: Fifteen years.

Mr. CARTER: She was built as a mine sweeper?

Mr. CLARK: Yes.

Mr. LEGERE: I should like to ask Mr. Clark how many fresh fish inspectors are available in Nova Scotia, or throughout Canada, if he can give us that information.

Mr. CLARK: I am afraid I do not have the breakdown by regions; but there are 169 fishery officers, grade 1; 39 fishery officers grade 2; 15 grade 3, and 10 grade 4.

Mr. LEGERE: Are all those officers considered fresh fish inspectors?

Mr. CLARK: No, some of them would be on fresh and frozen and pickled and salted fish and canned fish.

Mr. LEGERE: This is the reason I raised the question. I will take Yarmouth as an illustration. There are five or six fish dealers there, and they unload fish at the same time. Are fresh fish inspectors going to be at the five different localities?

Mr. CLARK: That is the problem we are attempting to work out, to provide the service that will be required with sufficient personnel.

Mr. LEGERE: That means they will have to stay right in the plant as the fish are processed?

Mr. CLARK: Pretty well. We are attempting to train our officers so they will be capable of inspecting any type of fish product and not just specialists in one or the other.

Mr. Chairman, I think there was another part of Mr. Robichaud's question which I did not answer. I am sorry. I think he asked about inspection in Quebec. Up until the present time, by agreement many years ago, inspection in the province of Quebec was carried out by the provincial administration. It is, of course, federal legislation. Up until now it has been carried out by the provincial fishery officers. But just recently there has been an arrangement made between the federal government and the provincial government whereby we, federally, are now assuming the inspection service in the province of Quebec, and it will be carried out by federal officers.

Mr. McQUILLAN: Mr. Chairman, I should like to ask a question in the conservation field for a minute. With regard to Vancouver island, Puntledge river, there have been press reports in the Vancouver papers indicating that the fisheries department felt that something should be done to restore the salmon run in this river very quickly.

Can you give us any indication of what was planned and what was the stumbling block toward the accomplishing of this?

Mr. CLARK: I do not think there are any particular stumbling blocks. This is a project we have under active consideration on the Puntledge river.

Mr. McQUILLAN: But the press reports were indicating there was conflict between the British Columbia Power Commission and the fisheries department as to the pro-rating of the cost of it.

Mr. CLARK: Mr. Chairman, discussions at the technical level with power companies and our own officers in British Columbia are going on all the time, and so far we have been reasonably successful in working out mutually satisfactory arrangements. I see no reason why this one should not be the same.

Mr. McQUILLAN: I gather there was a certain amount of divergency in re-establishing that run. Can you give us any idea as to when such a project will be embarked upon?

Mr. CLARK: I should think it is in our program for this year.

Mr. CARTER: Has any thought been given to the idea of using the *Cygnus* as a coast guard rescue vessel after she is decommissioned? Would she be suitable for that?

Mr. CLARK: Mr. Chairman, that is a rather difficult question and I can only express a strictly personal opinion. The reason we are replacing the present *Cygnus* is because she is getting pretty old and her steel plates are very thin, and—as a personal opinion—I do not think she would be satisfactory for coast guard work.

Mr. HOWARD: Mr. Chairman, I should like to raise a matter with respect to the fisheries patrol and patrol officers. That is somewhere under the field services, I imagine.

Mr. CLARK: Mr. Chairman, that item for the charter of patrol vessels would be covered under item 132.

Mr. HOWARD: Mr. Chairman, would it be all right to deal with it now? We have been chasing you all over the book, Mr. Clark, and there is no sense stopping now.

Mr. CLARK: Mr. Chairman, I wonder if Mr. Howard would clarify the question.

Mr. HOWARD: Yes. I just wanted to find out whether fisheries patrol officers came somewhere under field services, and then I was going to go ahead—

Mr. CLARK: Yes, that is right.

Mr. HOWARD: To start with, I should like to know how the charter rate for the boat—any particular boat—is arrived at. Is it by negotiation with the individual who owns the boat? Do you have a set scale of charter rates for boats of certain sizes or certain classes, or just how do you arrive at a particular charter rate?

Mr. CLARK: It is done by negotiation with the individual and with, of course, some idea based on experience of the charter rate situation in the area at the time. It is also based on experience as to what the value of a charter would be. But it is by negotiation.

Mr. HOWARD: Do you also negotiate the wage structure, or the salary structure of the officer himself, if he is on a chartered boat—or is that at a scale that is established?

Mr. CLARK: No. Our method of chartering vessels is not always a “bare boat” charter; it is the charter rate, including crew.

Mr. HOWARD: I have a pretty lengthy letter from an individual who mentions a salary of \$259 a month, to differentiate it from the charter rate he gets.

Mr. CLARK: I think I understand better now what Mr. Howard is asking. Actually, the rate for the captain of the chartered vessel is set for us by the Department of Labour.

Mr. HOWARD: That is \$259 a month, as he tells me?

Mr. CLARK: This scale varies, under the Department of Labour.

Mr. HOWARD: What is the basis for its varying?

Mr. CLARK: Depending on the size of the boat and the over-all rates.

Mr. HOWARD: In this particular case, then I assume it is \$259 a month. I have no reason to believe that—

Mr. CLARK: I would imagine so, Mr. Chairman—whatever the going rate is.

Mr. HOWARD: Some of the problems he raised, which I think might be dealt with, are these. I do not know this particular boat itself to which he has referred. I do not know the size of it; but he does have an engineer along with him, so it is more than a rowboat. The rate of \$259 a month seems to me unnecessarily low.

If this rate given to me by this particular individual of \$259 a month is a figure that we can use to guide us in looking at the other rates paid, I think they would all be necessarily lower and should be adjusted upward.

The second question raised in connection with these individuals who operate on this basis is the number of hours that they put in on their particular job. I understand there is some arrangement of time off at the end of the season, or sometimes during the season, depending on the number of days that they work. Is that substantially correct; or how is that operated?

Mr. CLARK: Mr. Chairman, in some of these cases the question of over-time is dealt with by compensatory leave at the end of the season. In some

other instances—with ships crews, which is developed by treasury board and applies to all departments—there is a system of paying a bonus of 15 per cent a month in lieu of overtime. So that there are the two systems.

Mr. HOWARD: What is the base to start with?

Mr. CLARK: A 40-hour week; a 5-day, 40-hour week.

Mr. HOWARD: Do you consider a day to consist of eight hours, or do you keep a stop watch?

Mr. CLARK: Mr. Chairman, it is very difficult, as I am sure Mr. Howard knows, to keep a time-clock on all of these vessels, particularly when they are out on their own and we have to rely, and we do rely, on the men themselves.

Mr. HOWARD: Is a day's work considered as eight hours, or do you take the number of hours stated as the number of hours put in?

Mr. CLARK: It is a 40-hour week.

Mr. HOWARD: So if the actual working week was in effect 60 hours, you would still consider it 40 hours?

Mr. CLARK: No; he would get the overtime.

Mr. HOWARD: You would consider that as 20 hours overtime?

Mr. CLARK: Yes.

Mr. HOWARD: Would that be based on the figures he submits?

Mr. CLARK: Yes.

Mr. HOWARD: Say he works 60 hours in one week. In some cases he would get a 15 per cent bonus. Fifteen per cent of what?

Mr. CLARK: Of his monthly wage, based on the number of days worked in that month.

Mr. HOWARD: Yes?

Mr. CLARK: It averages out, actually, Mr. Howard, because we have to take, in most cases, the man's own log book as to what he puts in—his time and days. This is pretty well checked by the local fishery officer, so we do have some check on it to make sure it is not being abused.

Mr. HOWARD: Do you have any idea what you consider to be the average number of hours one of these gentlemen would work, say in a week or during a season? Have you been able to compute that?

Mr. CLARK: I do not have it available, but we have records. During the season, and particularly during the peak of the season, it is substantial. Many of the men on the vessels, particularly on the west coast, can accumulate compensatory leave.

Mr. HOWARD: And they can take off time equal to the number of hours of overtime?

Mr. CLARK: Yes.

Mr. McQUILLAN: Do you have any difficulty in recruiting part-time fisheries patrols?

Mr. CLARK: We have not had too much difficulty. Last season it was a little more difficult to obtain suitably qualified men because most of them who were connected with the fisheries last year, were more interested in fishing.

Mr. HOWARD: Has any consideration been given to increasing this basic salary rate of \$259?

Mr. CLARK: They are under constant review by the Department of Labour which has local people determining the going rates for comparable occupations. We do not set the rate ourselves; it is done by the Department of Labour.

Mr. HOWARD: We will have to consult the Department of Labour.

Mr. PICKERSGILL: This is the position which has to do with the adoption of prevailing rates?

Mr. CLARK: It is not so much prevailing rates; it is what is referred to as ships crews, captains and engineers.

Mr. CROUSE: These are fishermen on charter. Is it not possible that an arrangement could be made whereby the owner of a ship could contract with the federal government to charter the ship for so much on a monthly basis and an arrangement then be made with the captain and owner, in respect of the salaries paid if they decide to work a certain number of hours? A fisherman may work 60 hours per week. I have had some experience in respect of this. A ship is sometimes chartered by the owner and the crew at the request of the captain carrying on experimental work, complete their work on Friday night and would have Saturday and Sunday off and would start again on Monday. The hours of work are purely a gentleman's agreement between the captain and the crew concerned.

Mr. CLARK: We do use both systems. In some cases it is a bare boat charter and in other circumstances it is boat, captain and crew.

Mr. LEGERE: What will happen in respect of the fresh fish inspectors in the case of a ship coming in at six o'clock in the evening? Will these inspectors put in overtime or can they refuse to go to the trouble of inspecting?

Mr. CLARK: We have never run up against that problem. The officers of the Department of Fisheries are willing to work 24 hours a day, including the deputy.

Mr. DRYSDALE: Mr. Chairman, to change the subject slightly, I am interested in this problem of the conservation of salmon, particularly British Columbia salmon. I believe there was some research done last year on the migration of British Columbia salmon into the north Pacific. I am wondering what research, if any, is continuing and whether or not the department would not be in a position, with the scientific data available, to plot on a chart the actual migration of the Canadian salmon.

The CHAIRMAN: That comes under item 136.

Mr. DRYSDALE: I will pass that for the moment. I will have some questions on this other matter of the Soviet Union and policy. May I be assured that next week I will be able to ask the minister questions concerning the matter of conservation?

The CHAIRMAN: Yes.

Mr. ROBICHAUD: Does the question of transplanting the oyster beds of New Brunswick come under the matter of conservation?

The CHAIRMAN: Yes.

Mr. ROBICHAUD: I would like some detail on its success to date, and what the intention of the department is for the present fiscal year.

Mr. CLARK: Mr. Chairman, in respect of the problem of the oyster fishery on the Atlantic coast, as I think the committee knows there was an epidemic which struck particularly in the oyster area of New Brunswick. This was a real disease and has practically killed off all of the oysters in many of the areas. It is a very serious matter. About three years ago we started transplanting disease-resistant oysters from Prince Edward Island to the badly hit areas in New Brunswick.

The situation up to the moment looks very good, and encouraging. The native oysters in these particular areas have been practically killed off, but the transplants of the disease resistant oysters from Prince Edward Island appear at the moment to be holding their own, and in fact have not been dying

off. We are not too sure, because it will require another two or three years before we are really satisfied that mortalities have not taken place. However, the prospects look very encouraging.

Again this year, in 1959, we are transplanting about 4,000 barrels of disease resistant oysters from Prince Edward Island to the areas in New Brunswick and Nova Scotia.

Mr. ROBICHAUD: Could Mr. Clark tell us which areas will be covered this year?

Mr. CLARK: I do not have it handy, but we have a list.

Mr. ROBICHAUD: Could we have the list for the next meeting?

Mr. CLARK: Yes.

Mr. ROBICHAUD: If the government would allow the department more funds, if the estimates could be increased, at the present time would the department be prepared to say, in view of the success achieved to date, which is very good and encouraging, that it would be advisable to increase this program by bringing in an additional quantity of oysters in order to build up the oyster industry in New Brunswick?

Mr. CLARK: We do not think at this time that more transplants would do any better job in resolving the problem than is being done at the present time. This is about the maximum we can handle at the present moment. I do not think we can accomplish more until we know more about it. Once we are satisfied that the disease resistant oysters are growing, developing and reproducing, then of course we can make a further all-out effort in transplants.

Mr. ROBICHAUD: In other words the department has not made a decision to close its program this year?

Mr. CLARK: No sir. I might say I now have the information concerning the areas where we are going to place these oysters this year. The areas are: Shippegan; Caraquet bay, Lameque bay; Miscou Harbour; Miramichi bay and the Kent county areas in New Brunswick. In Nova Scotia the areas are: Wallace-Malagash; Caribou harbour; Pictou harbour; Brule-Tatamagouche and the Merigomish area.

Mr. LEGERE: Could some oysters be transplanted on the Atlantic side of Nova Scotia, for instance down in the Yarmouth and Shelburne areas? Could they survive?

Mr. CLARK: I would imagine so. But I do not have the technical information.

Mr. LEGERE: I wonder if there is anyone here who could answer?

Mr. CLARK: Perhaps Dr. Pritchard might answer.

Dr. A. L. PRITCHARD (*Director, Conservation and Development Service, Department of Fisheries*): In respect of that area we have had some doubts as to whether the oysters would survive because the waters there are quite a bit cooler. There is some doubt as to whether our native oysters would survive in the area outlined by Mr. Legere.

However, the fisheries research board is experimenting with a European oyster to see whether perhaps it would fill a niche like that. This particular area about which you are speaking, is around Shelburne and Yarmouth where the water is quite a bit cooler than the normal range.

Mr. LEGERE: I asked the question because 20 years ago we brought some from New Brunswick and planted them around there and never even found a shell.

Dr. PRITCHARD: There were some good ones and they cut them out right away.

Mr. CROUSE: Has any consideration been given to developing and improving the shrimp beds which you have discovered? In speaking with some of the men

in the industry during the recent fisheries council meetings, they brought up the point it may be necessary for them to send boats as far south as New Orleans in order to secure shrimp. I know there are some shrimp on our coast. I wonder if you have given any thought to developing the known stocks which are presently available?

Mr. CLARK: We have done some work in connection with shrimp, but certainly not as far south as you have indicated. Off our coasts there is not too much of a program envisaged for the current fiscal year.

Mr. CROUSE: I meant that our own shipping interests would go as far as New Orleans, purchase them, and bring them back for processing. They would like to know if any further development is taking place to which they may look forward in the shrimp fishing industry off the coasts of Nova Scotia and Newfoundland. I think there are some beds near the Strait of Belle Isle area.

Mr. CLARK: Yes, we did discover some grounds. However, as far as I know at the moment they are there not in too great a volume, in commercial quantity.

The CHAIRMAN: Are there any other questions on this second group of items?

Mr. PICKERSGILL: I do not think I should ask Mr. Clark about this question relative to fisheries guardians and fisheries wardens. These are questions I would like to put to the minister. I do not want to hold up these items. May I have an assurance that when the minister is here I will not be precluded from satisfying as much of my curiosity as the minister is willing to satisfy.

Mr. KEAYS: Getting back to item 131, and fish inspectors in the province of Quebec, does the department intend to open central offices for the inspectors at Gaspé, Bonaventure and Magdalen?

Mr. CLARK: Yes. We will have district offices.

Mr. KEAYS: Will there be laboratories at these offices?

Mr. CLARK: Yes.

Mr. LEGERE: Under item 132, operation and maintenance, does that mean maintenance of your fishery patrol boats and equipment?

Mr. CLARK: Yes, sir.

Mr. LEGERE: It has been brought to my attention that all this equipment in my area comes from Halifax. Some of this equipment costs more than if it were bought in the locality where the boat is situated. I know of two cases.

Mr. CLARK: Mr. Chairman, I do not know of specific cases; but we follow the usual regulations in calling for tenders and bids. We take the lowest one we can get.

Mr. LEGERE: Suppose a boat is going along, strikes a buoy and damages the propeller; you cannot call for bids on that because you would tie up the boat too long. If they have to have a propeller in a hurry, is it necessary for them to go back to the main distributing place or could they acquire this article locally?

Mr. CLARK: It would depend, I think, on the circumstances, I should think if the repair facilities are available in the area and the equipment is available, it would be purchased locally.

Items 131 to 134 inclusive agreed to.

The CHAIRMAN: Gentlemen, at the beginning of the meeting I referred to the supplementary estimates as I was under the impression that they were before the committee. I am now informed that is not so.

May I have your consent to delete from the records references made earlier to supplementary estimates.

Mr. KEAYS: I do not know whether or not what I have in mind comes under this item. I am referring to the smoked herring industry in the Magdalen islands. The fish are called bloaters. The industry exports 150,000 cases of bloaters per year for which they get approximately \$2 a case, representing \$300,000. For a population of 12,000 people, that is quite an item.

The cost of production and the expense of bringing the containers from the mainland and the increased cost of labour has made it practically impossible for these people to continue packing the smoked herring.

As you all know, these bloaters are sold to low income countries such as Haiti or the Dominican Republic. They certainly do not have the money to pay more than \$2 a case for them. I am not sure whether or not it comes under this item; but is there no way of bringing help to those people in the way of a subsidy on the containers in which these bloaters are shipped? I am advised that the big exporters on this island intend to stop producing these herring or bloaters this year if they cannot get any aid.

An amount of \$300,000 is worth while when you consider the population. They just cannot produce them at the prices they are getting. I believe they are in need of a subsidy.

Mr. PICKERSGILL: Would this not come under item 139?

Mr. CLARK: Mr. Chairman, we have no item in our estimates to cover the kind of a subsidy to which Mr. Keays refers. I think it would be preferable, as a matter of policy, to address the suggestion to the minister.

Mr. KEAYS: I just wanted to make sure I got it in somewhere.

Item 135 agreed to.

The CHAIRMAN: We will adjourn until tomorrow morning at 9:30.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MARINE AND FISHERIES

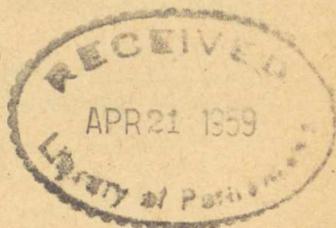
Chairman: ROLAND L. ENGLISH, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 3

Main Estimates (1960)—Department of Fisheries

FRIDAY, APRIL 10, 1959



WITNESS:

Honourable J. Augus MacLean, Minister of Fisheries; Mr. G. R. Clark, Deputy Minister; Dr. W. M. Sprules, Special Assistant, and Dr. A. L. Pritchard, Director, Conservation and Development Service.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

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Speakman
Stefanson
Stewart
Tucker—35.

(Quorum 10)

Antonio Plouffe,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

FRIDAY, April 10, 1959.

(4)

The Standing Committee on Marine and Fisheries met this day at 9.30 o'clock a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Anderson, Batten, Browne (*Vancouver-Kingsway*), Carter, Crouse, Danforth, Drysdale, English, Howard, Keays, Legere, Macdonald (*Kings*), Matthews, McGrath, McLennan, McQuillan, McWilliam, O'Leary, Phillips, Pickersgill, Robichaud, Stefanson, Stewart and Tucker—24.

In attendance: From the Department of Fisheries: Honourable J. Angus MacLean, Minister; Mr. Lowell A. S. Allen, Executive Assistant; Mr. G. R. Clark, Deputy Minister; Mr. S. V. Ozere, Assistant Deputy Minister; Dr. W. M. Sprules, Special Assistant to the Deputy Minister; Dr. J. L. Kask, Chairman, Fisheries Research Board; Mr. J. J. Lamb, Director, Administrative Service; Dr. A. L. Pritchard, Director, Conservation and Development Service; Messrs. H. V. Dempsey, Director, Inspection and Consumer Service; H. C. L. Ransom, Executive Director, Fisheries Prices Support Board; W. C. MacKenzie, Director, Economics Service; L. S. Bradbury, Director, Industrial Development Service; T. H. Turner, Director, Information and Educational Service; E. B. Young, Assistant Director, Conservation and Development Service; J. G. Carton, Departmental Solicitor; J. A. Albert, Chief, Financial and Stores Branch; W. R. Hourston, Chief, Fish Culture, Development Branch; R. Hart and W. Snaith, Industrial Development Service; H. A. Wilson, Fisheries Research Board; and Mr. O. C. Young, Assistant Chairman, Fisheries Research Board.

Examination of the Fisheries Department Main Estimates was resumed.

Mr. G. R. Clark was called and he supplied, as undertaken at the last meeting, supplementary answers relating to Items 131 to 135—Field Services.

The witness was questioned at length on fish conservation, salmon movements, fishing in territorial waters, casual employment, etc.

Dr. Sprules, pointing at a map, provided additional answers.

Dr. Pritchard was called and also assisted the Deputy Minister on technical matters.

Mr. Clark quoted from the *Canadian Fish Culturist*—February Issue Number 24. Copies of this publication being available, they will be distributed to the Members of the Committee.

Items 136 to 142—Special Appropriations, were called.

Consideration of Item 136 was begun.

At 11.00 o'clock, Mr. Clark's examination still continuing, the Committee adjourned until Tuesday, April 14 next at 11.00 o'clock a.m.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

EVIDENCE

FRIDAY, April 10, 1959.

The CHAIRMAN: Good, morning, gentlemen; we have a quorum. We shall proceed to the study of the third group of items under "special", items 136 to 142 inclusive.

SPECIAL

136. Canadian share of expenses of the International Commissions detailed in the Estimates	\$ 972,830
137. Newfoundland Bait Service	\$ 435,560
138. Extension of educational work in co-operative producing and selling among fishermen	\$ 90,000
139. Fisheries Prices Support Act Administration	\$ 63,940
140. Payment, subject to such terms and conditions as the Governor in Council prescribes, of assistance to producers of salted fish on products designated by the Governor in Council, in the amount of 50% of the laid down cost of salt purchased for their production, including authority to charge administrative costs to the Vote in these Estimates which provides for administration of the Fisheries Prices Support Act	\$ 600,000
141. Assistance in the construction of vessels of the dragger or long liner type, subject to such terms and conditions as may be approved by the Governor in Council	\$ 350,000
142. Assistance in the construction of bait freezing and storage facilities, subject to the regulations established by the Governor in Council	\$ 30,000
Appropriations not required for 1959-60	
	2,542,330

Mr. DRYSDALE: Mr. Chairman, I think we had one or two questions directed toward policy that were left over from the last meeting and it was intimated the minister would be prepared to consider these when he returned. I wonder if I could ask a question at this time.

The CHAIRMAN: Yes; proceed.

Mr. DRYSDALE: Mr. Minister, in regard to the matter of conservation, there were some fifty Soviet trawlers in the Bristol Bay area of Alaska going after groundfish and, possibly, halibut. There has been considerable interest on the question of conservation and I wonder if the minister could indicate what, if anything, the department has been doing with respect to investigating the movement of these Russian trawlers; also, has any effort been made to contact the responsible body or bodies in the Soviet Union with a view to co-operating in connection with the conservation of halibut in this area.

Hon. J. ANGUS MACLEAN (*Minister of Fisheries*): Mr. Chairman, the department has some information regarding Russian trawlers that are now fishing in the Bering sea. Reports indicate there are about 42 trawlers, 6 refrigeration ships, a tug and a transport. Of course, the matter of fisheries on the high seas is one over which control is exercised only by mutual consent and by treaty. As you know, Russia is not a signatory to the North Pacific fisheries treaty; and the understanding of the three parties to that treaty is that under it one of the obligations assumed by the three contracting governments is to confer with each other upon any steps to be taken, when it comes to the attention of any of the contracting parties that the fishing vessels of another country, which is not a party to the convention, affect adversely the operations under the convention. As yet, we have no indication that this Russian fleet is fishing any types of fish that are covered by any treaties now in effect.

Mr. DRYSDALE: How would you be able to find out whether they were not? Do you have any connection with your Russian counterpart? Would they advise you what type of fish they would be catching?

Mr. MACLEAN (*Queens*): I am afraid not. The deputy minister may have something to say in addition to what I have said.

Mr. G. R. CLARK (*Deputy Minister, Department of Fisheries*): As the minister has pointed out, we are now seeking information regarding the fishing operations of the Soviet trawlers in the area. So far as we know, at least from the reports up to the present time, they are not taking any fish which would adversely affect the present convention.

Mr. DRYSDALE: What type of reports are they?

Mr. CLARK: The reports that we have so far are coming from numerous sources. Actually, we hope to have more concrete information very shortly due to the fact that some Canadian and United States halibut fishing vessels were to be on these grounds starting on April 1; but the weather has been bad and the latest report is that they had not reached there at the opening of the season. But this would be first-hand information from our own fishermen.

Mr. DRYSDALE: May I ask the minister a hypothetical question?

Mr. HOWARD: You will get a hypothetical answer.

Mr. DRYSDALE: In the event that you find they are taking halibut from these particular fishing grounds, will some representations be made to the Soviet Union to try to interest them, along with the other interested parties, in the matter of conservation?

Mr. MACLEAN (*Queens*): We as a government will not make any representations, but the signatories to the existing treaty will decide among themselves what are the most beneficial steps to take under the circumstances.

Mr. HOWARD: This is connected to a large degree with vote 136, because the international commission comes under it; but I am sure once we get started on it, it would not be too objectionable if we go a little further afield. But inasmuch as Russia is not a signatory along with Canada, the United States and Japan, on the international North Pacific fisheries commission, I would assume then that the Russian fleet could fish a species other than halibut and could very easily get involved in the fishing of salmon in the North Pacific area by fishing Canadian salmon or salmon from Canadian waters in an area that is now prohibited, say, to the Japanese fleet. Is that possible?

Mr. MACLEAN (*Queens*): This is entirely possible. As a matter of fact, there seems to be perhaps a conception grown up that the North Pacific from a fisheries point of view is preserved strictly, in this particular case, for Canada, the United States and Japan, and that we have carved it up and put a fence around it, so to speak. Of course, this is not so. Any nation is entitled to fish anywhere in the world outside of the territorial waters of other nations, and any restrictions they put on themselves they accept only through mutual agreement. Usually they do this only if there is some compensating advantage or mutual advantage to do so for all the nations who happen to be exploiting the particular fishery resource.

In the northwest Atlantic fisheries there is a far larger number of countries involved, and most of the ones who are actively fishing there are in ICNAF, the international commission for the northwest Atlantic fisheries. But they come in voluntarily. In the last couple of years the U.S.S.R. has joined ICNAF and, I believe, West Germany. They are the last two to join. There is a possibility that Poland will join. Of course, Russia is a signatory, too, to the fur seal convention and also to the whaling convention. So there are already three international commissions on which both Canada and Russia are members. But it should be borne in mind that where a treaty does not exist, the nation

involved only has control over its fisheries to the extent of its territorial waters. If the North Pacific fisheries treaty were dissolved, or the member nations, by giving proper notice, decided to withdraw from it, then anyone who cared to would be able to fish up to the three mile limit on the west coast of Canada.

Mr. HOWARD: I am sure I can foresee a great deal of difficulty arising, and in particular in regard to Russia in this instance, because they have some of their ships north of the particular area where our salmon intermingle; but there are other nations in that part of the world who might at some future time pose a threat. China is a distinct possibility. The fact that they would not be a party to any treaty in respect to the fishing of salmon on the high seas would have the effect of practically ruining our salmon runs if there is extensive fishing done in the intermingling area. This would deplete or remove the catch of fish out there and in this way they would not be able to return to their spawning grounds. It seems to me, if such is the case, that very extensive discussions should be undertaken, probably through the North Pacific fisheries commission, with respect to these other nations, to see whether or not we can work out a mutually satisfactory arrangement respecting certain areas, by prohibiting fishing in these areas.

Mr. MACLEAN (*Queens*): Yes. I think it is fair to say that Canada as a nation has been a leader in promoting agreements which take into account conservation of fish stocks that are fished by more than one nation. This is something that will continue to be done; and this being a more or less hypothetical question at the moment, it is pretty difficult to give any definite answer as to what action should, might or could be taken under a given set of circumstances. Actually, this has not materialized as yet, but we are fully aware of this possibility.

Mr. HOWARD: Do we have knowledge of the range and so on of China's fishing fleet?

Mr. MACLEAN (*Queens*): Personally, I have not, but it is not very great, so far as I know.

Mr. DRYSDALE: Supplementing Mr. Howard's question, have you any idea of the size of the Russian fleet that could participate in mid-ocean fishing for salmon in the Pacific? Have you any idea of the potential Russian fleet that would be suitable?

Mr. MACLEAN (*Queens*): Not very much, no.

Mr. DRYSDALE: Have you any idea if there is any indication or likelihood that the Russians are going into that area perhaps within the next year or two?

Mr. MACLEAN (*Queens*): As far as salmon is concerned there has not been any indication. The Russians, in common with a lot of other nations, do not advise us in advance what their plans may be.

Mr. DRYSDALE: Have you any idea of the present salmon catch by Russian fishermen let us say, for a year or two?

Mr. MACLEAN (*Queens*): I do not have the figures available at the moment. However there are figures which indicate that Russia is, I believe, the fourth producer in the world of salmon. I cannot say what the relative amounts are.

Mr. DRYSDALE: Perhaps that would indicate a potential interest in the Pacific?

Mr. MACLEAN (*Queens*): They have never fished in the high seas salmon fisheries, but rather off the Pacific coast of Russia where they have a number of salmon rivers and do a considerable amount of fishing. It is similar to the type of fishing that is done in the Fraser river on our own immediate west coast.

Mr. DRYSDALE: Do you feel there would be no immediate incentive to go into the deep sea fishing, the same as the Japanese have, due to the present type of equipment they have?

Mr. MACLEAN (*Queens*): They do not keep us informed in advance of their plans. However they have a very substantial coastal salmon fishery which may satisfy their requirements. On the other hand, they may have other plans.

Mr. DRYSDALE: Could I turn to another phase of the problem, that is, the question of the investigation of the salmon, specifically sockeye salmon. Apparently there has been some research as to the intermingling somewhere in the mid-Pacific. I am wondering what has been the extent of these surveys, what bodies have been making the surveys and whether your department, for example, is now in a position to plot accurately on a chart, shall we say a migration graph of these sockeye salmon?

Mr. MACLEAN (*Queens*): I could give you a general answer to that, but I think perhaps I should pass it over to someone who could give you a more detailed reply. Mr. Clark may reply or, if he wishes, he could designate one of the other officials.

The CHAIRMAN: Mr. Clark, I think we have another question from Mr. McQuillan to be answered.

Mr. CROUSE: I also have one.

Mr. DRYSDALE: Do I get an answer to my question?

Mr. MACLEAN (*Queens*): Perhaps we had better carry on with this one first.

Mr. DRYSDALE: I do not want to be passed up.

Mr. CLARK: Mr. Chairman, I will deal first with the question pertaining to the north Pacific fisheries. As I think was reported to this committee last year, during the examination of the department's estimates, we gave a fairly extensive review dealing particularly with the size of the area. I think most of the gentlemen here will recall that it is an extremely large area in the whole of the north Pacific ocean.

A large coordinated fishery research program designed to cover the north Pacific ocean has been carried out by Canada, Japan and the United States since 1955. The program has covered the north Pacific ocean from 40 to 60 degrees north latitude and from the Asian shore of Japan and the Kamchatka peninsula to the North American shore. Data have been obtained on the following: oceanography—currents, temperature, salinity, dissolved oxygen, inorganic phosphate, plankton; fisheries biology—experimental fishing to locate salmon, tagging, identification of parasites, blood serum studies, skeletal anatomy, scale structure, food studies, age, maturity, growth, depth distribution and seasonal migration.

In this area in general Japan has used two or three research vessels and has concentrated her studies from the Asian coast to about 165 degrees west longitude. The United States has operated three to five vessels from about 175 degrees east to the North American shore with most work done along the Aleutian chain and in the southern Bering sea. Canada has operated two research vessels concentrating her work in the Gulf of Alaska area from 155 degrees west longitude to the North American shore.

It must be remembered that this is a coordinated program, so there are no conflicts between the three countries. All the information so assembled is reviewed by the scientists of the three countries and reports are made on that basis to the commission, in order to get a consolidated report amalgamating all the scientific information.

Canada's major contributions to the coordinated program include detailed analysis of oceanographic conditions in the northeastern Pacific, determination of parasite indicators to identify stocks of Asian and North American salmon, determination of the skeletal structure of Pacific salmon from all sources, scale studies to identify salmon stocks and determination of the habits and migration of young salmon as they enter the ocean.

There has been a free exchange of specimens and data between the three countries with each country specializing in certain phases of the coordinated research.

The major findings to date may be summarized as follows: very few salmon are found south of 50 degrees north latitude in the open ocean. Concentrations occur along the Asian and North American shores, down to 40 degrees north latitude during the late summer as the salmon approach their respective spawning streams. In early summer concentrations occur along the Aleutian chain and in the Gulf of Alaska; salmon of Asian and North American origin—Alaska—intermingle in a broad zone from 170 degrees east longitude to 165 degrees west longitude. There are minor year to year differences, seasonal differences and species differences—sockeye, pink, and chum; although many thousands of salmon have been tagged in the mid-north Pacific no returns have been recorded from Canadian streams. Only salmon tagged in the Gulf of Alaska within a few hundred miles of the Canadian coast have been recovered in Canadian streams.

So the conclusion, so far as the salmon of Canadian origin is concerned, is that they do not travel as far north and west to enter into the high seas fisheries.

Mr. Chairman, I think we will be prepared to give detailed information on this question. I think the easiest way would be, if it is agreeable to you and to the members of the committee, to ask Dr. Sprules to point out some of this information on a chart.

Mr. DRYSDALE: Before he begins, would it be possible to have a simplified chart printed as an appendix to these proceedings? Could the doctor prepare one?

Dr. W. M. SPRULES (*Special Assistant to the Deputy Minister of Fisheries*): Mr. Chairman, I am afraid at the moment there is no simple way to create a diagram of the multitudinous pieces of separate data which we have on the north Pacific fisheries at the present moment. There would have to be a separate chart for each species, a separate chart of distribution based on whether it is information from tagging, from presence of parasites or from presence of the type of scale structure and so on. I am not trying to get out of work, but I am sure we would need 15 or 20 diagrams to try to show you this story.

The conclusions are pretty well summarized in Mr. Clark's statement. (*Hereafter, Mr. Sprules referred to a map of the North Pacific Ocean.*)

As you can see, this is our North American coast with British Columbia in this small section here, the Alaskan area, the Aleutians, Kamchatka and Japan. The Japanese research vessels have been covering the section from 40 degrees north latitude to 60 degrees north latitude—from here to about here. They have been working from the Asian coast over to just past the provisional line of the treaty at 175 degrees west longitude. The American boats have been overlapping, going over on to the Asian side to about 175 degrees east longitude and working from there to the North American coast by staying in the Bering sea, and along the land area north and south of the Aleutians. The Canadian boats have taken this large sector of the Gulf of Alaska, from 155 degrees west longitude to the coast and from 40 degrees north latitude up to the Alaskan land mass.

There has been an exchange of data obtained from all these operations. The concentrations of sockeye salmon, in which I think you are probably most interested, occur along the Aleutians, and in the early part of the summer the mature salmon are bunched along the south side of the Aleutian chain. Then they move through the islands in the area of intermingling. There is then a general movement back toward the Alaskan mainland at Bristol bay.

There have probably been 50,000 or more tags placed on the salmon throughout this area, right over as far as Kodiak island, and not one of those tags on sockeye salmon has been returned east of Kodiak island. There has been one chum tag only from the outer islands which was recovered in southeast Alaska. In other words, every pink or sockeye salmon tagged near 155 degrees west longitude has always been recovered west of the area of tagging.

I think we could safely say at the moment we have not tagged in a stock of fish comprised of an appreciable number, if any, from British Columbia.

As you get over just off the coast of North America in the southeastern Alaska area or near the Queen Charlottes, then the recovery will be from northern British Columbia streams or the Fraser river. The tagging up until now has been within a few hundred miles of the coast in this area.

From the scale structure, which we are using now to identify certain stocks of salmon, there is some indication that the fish in the central part of the Gulf of Alaska, early in the season of last year, were part of the fish from the large Adams river run. This was not determined by tagging but by another method which is not as positive as tagging. There is no indication that British Columbia fish per se move beyond a rather narrow inshore area of the Gulf of Alaska, pretty close to home at any stage.

When you get out into mid-ocean in the summer time there are no salmon to speak of south of 50 degrees north latitude. From early spring or late winter there are a few salmon from 40 degrees north latitude right up to 60 degrees. But then they move north and become concentrated along the Aleutian Islands; later they move toward the two coasts to the spawning respective areas.

Mr. DRYSDALE: What investigation has been accomplished between 155 degrees west and 175 degrees west longitude. The Canadians do not go beyond 155 degrees.

Dr. SPRULES: No; and the Americans go from the North American shore over to 175 degrees east longitude. That is all overlapping, between 155 degrees west longitude and 175.

Mr. DRYSDALE: But coming south, where you have indicated the North Pacific, who, if anybody, has made any surveys of that intermingling area?

Dr. SPRULES: It is not an area of significant intermingling. I pointed out it is not an area of salmon abundance.

Mr. DRYSDALE: You said there are some salmon in that area in the spring.

Dr. SPRULES: Yes; and the Japanese have done experimental fishing from about 40 degrees north latitude right up through, to 60 degrees north latitude in Bering sea; they have found a few salmon in the southern waters. United States has operated from about 175 degrees east longitude over to the American shore, from 40 degrees north latitude up to 60 degrees, and they have found the odd salmon in that area in the very early spring. Canada has operated from the Alaskan shore at 60 degrees north latitude in the Gulf of Alaska down to 40 degrees and they have found the odd salmon in southern offshore waters. There has been a complete overlap of the three investigations. But after the original large survey from 40 degrees north latitude up, when it was found there were few salmon south of 50 degrees, we then concentrated our efforts along the migratory routes and in the north where the stocks are concentrated.

Mr. DRYSDALE: Would you be in the position, for example, to indicate a relatively fixed migration line, say perhaps the sockeye on the Fraser river, on the basis of the information you have, or is your information insufficient to allow you to do this?

Dr. SPRULES: The answer to that question is that we have not been able to pinpoint definitely the outside limits of the migration of British Columbia sockeye salmon at this time; but from our information I could say that many, many smolts were tagged along our coast to find where they went in the ocean after they left the rivers of origin; and in every instance the recoveries started to come north and a little west of the rivers from which the fish originated.

So speaking of the fish coming out of our rivers—and, by the way, it is a long shore—the direction indicated would be in general north and a little bit west from where the fish left the rivers. We know from adult tagging if we tag near the coast of southeastern Alaska, northern British Columbia or west of the Queen Charlotte Islands the movement is always south in the late summer and fall. You have this situation: the adults returning south; the young going out with a north and west component; plus the fact you do not get fish in the open ocean near 40 degrees north latitude in any quantity; and because of the fact there have been no recoveries in Canadian streams of any fish tagged along the Aleutians and over to Kodiak Island.

Mr. DRYSDALE: How extensive is the tagging? How many fish are tagged in a season?

Dr. SPRULES: There are about 20,000 fish tagged.

Mr. DRYSDALE: That would cover all the fish, smolts and so on?

Dr. SPRULES: No; that is just tagging in the high seas. Smolt tagging is a separate project altogether.

Mr. DRYSDALE: Sockeye tagging was undertaken to establish what the Canadian or British Columbia run is. To what extent is the tagging done?

Dr. SPRULES: There is very little tagging of adult sockeye that we know originate in British Columbia.

Mr. DRYSDALE: I am not trying to put you on the spot, but you are not actually in a position to give an accurate indication as to the run of the fish.

Dr. SPRULES: Mr. Chairman, I began my remarks by saying we could not define this now. But we had a great deal of information to indicate the areas where these fish are not which, although it is negative evidence, is pretty good information in the hands of a scientist.

Mr. DRYSDALE: Are you taking any positive steps to ascertain the facts from the positive rather than the negative end of it?

Dr. SPRULES: No. At the particular moment there is no large-scale program of tagging adult salmon, in the eastern half of the Gulf of Alaska in an endeavour to get a large return in Canadian streams.

Mr. DRYSDALE: Well, in conclusion, the basis of your theory is negative in the sense that you are not relying on what the Americans have produced in connection with their 50,000 Atlantic salmon.

Dr. SPRULES: We are not relying on the American statements. We are analyzing American data, Japanese data and our own data. But our part of the North Pacific research program does not include the type of investigation that is being referred to at the moment, and our time is being spent completely on the other aspects of the project which we have accepted as part of our contribution to the over-all program.

Mr. HOWARD: Is this provisional line which you referred to 175 west?

Dr. SPRULES: 175 west longitude.

Mr. HOWARD: Was the last meeting of the commission held in Japan last fall? I understand it was.

Dr. SPRULES: Yes, Mr. Chairman.

Mr. HOWARD: And at that meeting the United States proposed to move that provisional line somewhere else. What did they propose? Where did they propose to move it; and what were the reasons for that?

Dr. SPRULES: This setting at 175 west longitude is a provisional line and the American proposal was 170 east longitude, which is here. That is 15 degrees difference. Now, from our investigations, 170 degrees east really represents the most westerly point from which a fish has been taken which, from our studies, could be reasonably identified as a fish having originated in the Bristol Bay area. It was the outside limit, and included everything.

Mr. HOWARD: Their proposal was made to ensure that the Japanese would not fish beyond 170 degrees east and would not then be catching Alaskan salmon. Is that what they were getting at?

Dr. SPRULES: In effect, yes, Mr. Chairman.

Mr. HOWARD: Do you have any idea what Canada's position was with respect to that suggestion?

Dr. SPRULES: Well, Mr. Chairman, I think we should leave this to the commissioner.

The CHAIRMAN: Thank you, Dr. Sprules, for the information you have given to this committee and to the public.

Mr. HOWARD: What was Canada's position with respect to the United States proposal of moving the boundary to 170 degrees east, and what were our reasons for taking whatever position we did. I assume it was not moved and that it is still 175 west.

Mr. CLARK: Mr. Chairman, as a result of the last annual meeting of the international North Pacific commission held in Tokyo last fall, there was no decision to either move the line east or west. One thing Dr. Sprules did not mention was the fact that in this area we have found that there are a good many salmon of Asian origin which come over to the eastern side of the Pacific, particularly pinks. So there is a very broad area of intermingling of species from both coasts, the east and west side of the Pacific.

But in answer to your question in regard to Canada's position at the annual meeting of the commission last fall, after examination of the information which had been obtained we could not agree there was a quantitative value placed on the American evidence that was sufficiently strong to move the line as far to the west as they had proposed, because this treaty says the information must be based on scientific evidence. The conclusion was that there was not sufficient scientific evidence up to this time to move the line, as I say, either east or west.

I might say, Mr. Chairman, in connection with this, that Canada proposed a resolution to the commission at this annual meeting, which was accepted unanimously; and, if it is in order, I should like to read the resolution which was accepted by the commission.

In view of the results of scientific investigations to date as contained in the reports of the committee on biology and research and in accordance with the objective of conservation of fishery resources of the North Pacific ocean, as expressed in the international convention for the high seas fisheries of the North Pacific ocean, the ad hoc committee on the protocol . . .

This is the one in the treaty dealing with the provisional line—

. . . recommends that the international North Pacific fisheries commission respectfully recommend to the governments of the contracting parties that full consideration be given to the conservation needs of these fisheries resources in the area of common concern when preparing fishing regulations for future operations.

That was the end of the resolution. The idea behind this was that the international North Pacific fisheries commission can, of course, only recommend; it cannot make regulations. But it did very strongly recommend to the contracting parties that in making fishing regulations particular attention should be paid to the needs of conservation in the intermingling area.

Mr. HOWARD: Is it correct to say that Japanese fishing vessels cannot fish to the east of 175 west and the United States and Canadian vessels cannot fish to the west of that area?

Mr. CLARK: No, that is not so. The treaty provides that there is no restriction on either Canadian or American fishing vessels going to the western side of the Pacific.

Mr. HOWARD: I do not know scientifically whether this question is sensible or not, but has any thought been given to prohibiting, by treaty, all fishing in the area of intermingling. Would the catching of immature fish in that area have any detrimental effect on the salmon runs of either country?

Mr. CLARK: Of course, this is the problem. Actually the provisional line was drawn up for this very purpose, that is to try to separate the stocks of fish which spawn on the North American side and on the Asian side.

Mr. HOWARD: That is right; not a line of demarcation but a circumscribed area?

Mr. CLARK: Yes. It has been considered and talked about a good many times.

Mr. DRYSDALE: Why does Canada stop fishing at 150 degrees west?

Mr. CLARK: There is a difference here. It is not a question of stopping at 150 degrees; we do not fish there commercially.

Mr. DRYSDALE: I realize that, but the investigations have never quite gone that far, so far as Canada is concerned. Why have they stopped there?

Mr. CLARK: Due to the cost, the funds required and qualified personnel, we are not able to go over the entire North Pacific ocean. It is a question of sufficient personnel and funds to do the job.

Mr. CROUSE: Could we have an explanation of the reason for the increases under item 136, the one being from \$230,000 to \$260,650 and the other from \$470,000 to \$535,000? Those two items appear to be increased.

Mr. PICKERSGILL: I understood, Mr. Chairman, we were not going on to 136 until we had these questions that were reserved from yesterday answered.

The CHAIRMAN: Mr. McQuillan had a question and Mr. Clark will now answer it.

Mr. CLARK: During the discussion on item 132 yesterday, we were considering the spruce budworm spraying and I think Mr. McQuillan asked for some information relative to the effects on the fish in British Columbia. There is a publication put out by the department which was just received yesterday afternoon. I think, Mr. Chairman, that it would contain all the information in which Mr. McQuillan is interested. It is the February issue of *The Canadian Fish Culturist*, and there are four articles in the publication dealing with the forest spraying by insecticides.

If I may give a summary in reply to Mr. McQuillan's question, during mid-June of 1957, an aerial spraying program was conducted on 155,000 acres of timberland on the northern portion of Vancouver Island, in an attempt to control an outbreak of black-headed budworm. The formulation used was one pound of DDT in a solvent with an emulsifier added, and blended and one U.S. gallon with diesel oil. This was applied at the rate of one U.S. gallon per acre.

The damage to the fish and fish-food populations was assessed on the major streams, and on four of these was found severe. The fish mortality was confined generally to coho fry, trout, steelhead yearlings and possibly alevins of both trout and steelhead.

In the four major streams affected by spraying, the progeny of an estimated 1956 escapement of 43,000 coho adults and the juvenile stages of several thousand steelhead and trout was almost eliminated.

The reduction of aquatic insects parallels the loss of coho fry and the productivity of several streams is not expected to return to adequate proportions for at least two years.

A series of bio-assays was conducted at the Nanaimo biological station of the fisheries research board of Canada. The tests indicate that a safe concentration of the formulation used in this insect control program is below 0.05 parts per million. Analysis of water samples taken in the field showed that toxic concentrations of DDT existed at four test stations for more than three days after spraying.

Mr. McQUILLAN: It would appear from your summary that this is only a temporary upset of the fish population and the position will be recovered after two or three years.

Mr. CLARK: We hope so.

Mr. McQUILLAN: You have reason to believe so?

Mr. CLARK: We hope.

Mr. PICKERSGILL: I did not ask this question yesterday because the minister was not here and there are certain implications in it which he will understand and recall. I have been looking since at page 201 of the details and I cannot find anyone described as a fisheries guardian. I must confess that I have never been able to get quite clear in my mind the difference between a fisheries warden and a fisheries guardian. Perhaps the technical officers could explain that first and show me where the fisheries guardians are before I put my question.

Mr. MACLEAN (*Queens*): By way of explanation, I would say that wardens are civil servants and they are recruited into the service by the Civil Service Commission; the guardians on the other hand are casual employees and shown in the estimates as such.

Mr. PICKERSGILL: I am unable to find guardians anywhere and I wondered if they had been abolished since last year.

Mr. MACLEAN (*Queens*): They are shown as "casuals and others", I believe.

Mr. PICKERSGILL: I do not say that I have made an exhaustive survey of the details, but I ran over them quickly and could not find the word guardian anywhere.

Mr. McWILLIAM: Maybe they have been decertified.

Mr. PICKERSGILL: Mr. McWilliam adds they may have been decertified.

Mr. MACLEAN (*Queens*): About halfway down on page 202 you will see "casuals and others" and the amount is \$535,500.

Mr. PICKERSGILL: There is no number given.

Mr. MACLEAN (*Queens*): No.

Mr. PICKERSGILL: In other words, all these wardens referred to on page 201 are appointed by the Civil Service Commission.

Mr. MACLEAN (*Queens*): Yes.

Mr. PICKERSGILL: Although the majority of them appear to be seasonal, there are five more than last year and there are two fewer of the full-time wardens. That is the fourth item on page 201.

Mr. MACLEAN (*Queens*): The explanation is that some of the full-time wardens in Newfoundland were upgraded to fisheries officers Grade 1.

Mr. PICKERSGILL: What is the explanation of the increase in the part-time wardens?

Mr. MACLEAN (*Queens*): Over the last number of years there has been a program that, where feasible, we replace guardians by seasonal wardens, the belief being that men who have assurance of employment from year to year, as long as they remain satisfactory, and who are employed for a longer period, although just seasonal, are able to enforce the regulations to better advantage than a greater number of men employed for a shorter time on a casual basis. However, there are many areas where this is not feasible. It depends to a great extent on the availability of feasible transport. Where you have some remote area where transportation is not readily available to the would-be poacher or conversely to the warden, you have to have a local person there while the season is open to keep an eye on things. But where there are roads and where you can have a seasonal warden for a greater period of time covering a larger area where transportation is rapid and easy and where his movement cannot be easily detected by a would-be poacher, we find that more efficient.

Mr. PICKERSGILL: I was interested in this, due to an explanation which, I confess, I obtained outside the committee some time ago. I am not questioning what the minister has said; but in the selection of seasonal wardens there was a much narrower geographical restriction than there is in the selection of guardians. I understand the minister selects guardians and his choice is only restricted by his discretion, whereas in the case of the Civil Service Commission selecting wardens, there is a very narrow area indeed in which they can be chosen. Is that not correct?

Mr. MACLEAN (*Queens*): They have local preference. It is up to the department to determine the area of preference.

Mr. PICKERSGILL: Even in the Civil Service Commission?

Mr. MACLEAN (*Queens*): That is right. Perhaps what the member is referring to is that there was one case last summer where in a competition the meaning or the restriction of the area was not indicated on the posters advertising the competition. As a result, there was considerable misunderstanding as to what the area of preference actually was.

Mr. PICKERSGILL: Well, to tell you the truth, I am not particularly interested in it. I am not really too much interested in these appointments made by the Civil Service Commission, except that one point. Are all the seasonal appointments by the Civil Service Commission made in the maritime provinces or are any made in Newfoundland?

Mr. MACLEAN (*Queens*): Yes, we have wardens in Newfoundland.

Mr. PICKERSGILL: Appointed by the Civil Service Commission?

Mr. MACLEAN (*Queens*): Yes.

Mr. PICKERSGILL: What proportion of this figure of 135 would be in the maritime provinces and what proportion in Newfoundland?

Mr. MACLEAN (*Queens*): I think we can obtain those figures for you in a moment.

Mr. PICKERSGILL: Meanwhile, perhaps I could put another question. Are any of these casual guardians in the maritime provinces?

Mr. MACLEAN (*Queens*): Yes, there are. There again I have not the figure. There are 123 guardian positions in Newfoundland, but I believe we have the detail here.

Mr. CLARK: Mr. Chairman, in connection with wardens, full-time, in Newfoundland—

Mr. PICKERSGILL: I am not interested in the full-time ones at all, just the seasonal ones.

Mr. CLARK: There are 17 seasonal wardens in Newfoundland.

Mr. PICKERSGILL: Seventeen out of 135. In connection with guardians, could the distribution as between Newfoundland and the maritime provinces be given?

Mr. MACLEAN (*Queens*): I am afraid it is pretty difficult to answer this question in the form in which it has been asked, because in the case of casuals the money is provided and treasury board requires that it be done in numbers of man-years. It depends on what seasons are open and closed, and so on. One individual may be employed as a guardian for four months and another one somewhere else for two months. It depends on what seasons are open and closed. It is a difficult question to answer.

Mr. ROBICHAUD: You must have the figures for the last fiscal year?

Mr. PICKERSGILL: Surely the minister would know how many. I assume they must have a pay list.

Mr. MACLEAN (*Queens*): Yes.

Mr. PICKERSGILL: Which would include the names?

Mr. MACLEAN (*Queens*): Yes, we could provide that figure, but we have not it here.

Mr. PICKERSGILL: I am not anxious to press you on that.

Mr. MACLEAN (*Queens*): We could readily give you a list. You wish the totals of all the individuals who were employed as guardians.

Mr. PICKERSGILL: Last year.

Mr. MACLEAN (*Queens*): Yes.

Mr. PICKERSGILL: All I am interested in knowing is how many there were in the maritime provinces and how many in Newfoundland.

Mr. MACLEAN (*Queens*): The total of individuals?

Mr. PICKERSGILL: Yes, the individuals. I am not interested in man-years because I do not understand things like that; and I doubt if the treasury board does either. I now come to the question the minister has been anticipating all along. I know he has been waiting for it and has an answer available. I am speaking with reference to appointments in Newfoundland. The members from the maritime provinces can speak for themselves. In respect of the appointments in Newfoundland, I wonder if the minister could give us an assurance that from now on veterans will be given preference in all these appointments, and in a case where no veteran is available that consideration will be given to those persons who, because of having large families, find it almost impossible for them as the bread winner to leave the place—that preference will be given to persons of that type over persons who are quite capable of going away to work.

Mr. MACLEAN (*Queens*): That has been my policy since I became minister. I told this committee last year what I was endeavouring to do in this connection. At the moment I do not have the reference, but it can be found in the proceedings of last year.

I might say what we are endeavouring to do is very similar to what Mr. Pickersgill has suggested, or along those principles. There may be occasions when we make a mistake. Again, there are cases where there is some difference of opinion as to the definition of a veteran.

Mr. PICKERSGILL: Quite.

Mr. MACLEAN (*Queens*): For instance, there are many men who served in the Canadian forces throughout the war who do not qualify for veterans preference, as defined by the Civil Service Commission. I have been criticized on more than one occasion when I appointed a veteran who was never posted overseas. I had objections from veterans who served for a short time but happened to be posted overseas.

Mr. PICKERSGILL: The minister knows he has had no such criticism from me. I might say I am completely satisfied with the assurance the minister has given.

I confess, when I see this for certain types of casual employees, I think it is a waste of the public money to have them appointed by the Civil Service Commission and have these competitions held. I never believed that we should have to appoint everybody that way. We spend perhaps \$200 to appoint these casual employees who are employed for three months. It is ridiculous.

I agree that continuity of service is very valuable to the department and valuable in these salmon streams where we want persons who will preserve the salmon. That is my feeling, although I want to see my constituents get jobs as well.

Does the minister think the department is moving fast enough in getting these appointments made by the Civil Service Commission?

Mr. MACLEAN (*Queens*): Yes. There are areas that are rather inaccessible as I said earlier. If a permanent warden who lives somewhere else has to come into that rather remote area, everyone knows of his arrival and all the poachers have time to go home and go to bed before he arrives.

Mr. PICKERSGILL: I see the point. I am quite satisfied.

Mr. CARTER: There is a point in respect of the seasonal wardens who are appointed by the Civil Service Commission. If I understood the minister correctly, he said it was within the discretion of the department to restrict the area from which the appointment could be made.

Mr. PICKERSGILL: That is what the minister said.

Mr. MACLEAN (*Queens*): One of the privileges to which competitors are entitled under the Civil Service Act is area preference. The area preference varies depending on the type of job. That is what I intended to get across. From information obtained from the department as to what are the duties of the men concerned, the Civil Service Commission determines what the area preference will be, whether it will be provincial, county, or something of that sort.

Mr. CARTER: The picture which formed in my mind was that these wardens were being appointed very much like Post Office employees where they are strictly patrons of the Post Office.

Mr. MACLEAN (*Queens*): I do not think that I expressed myself clearly. The size of the area of operation is determined by the duties for which the appointee is responsible.

Mr. CARTER: I find it difficult to understand the relationship between the duties of man and the locality from which he comes.

Mr. MACLEAN (*Queens*): The area of duty. For example, if there is a competition for the appointment of a fishery officer grade 5, say in the maritimes, Prince Edward Island or Nova Scotia, if you limited it to Nova Scotia you would perhaps limit the possibilities to one or two men. In that case the competition would be open to the maritimes or even to a wider area, including eastern Quebec.

Mr. CARTER: I am trying to restrict it to the seasonal warden who is employed for six or eight months at the most, and I am wondering why you should restrict the area. I can understand how it would apply in the

case of these fisheries officers where you would have to have a wide area from which to select. But in the case of a fisheries warden, that does not seem to apply.

Mr. MACLEAN (*Queens*): In effect it means only that he is selected from the county—I am not sure that the area in this case would be a county; in some cases it is half a county. He is selected to make sure he is a resident of the general area, one of the reasons being that we are not prepared to provide living accommodation away from home for these men, nor do we feel it reasonable that someone, in order to carry out his warden's duties, should drive from one end of the province to the other every week at government expense.

Mr. CARTER: There is one other point. Within this area, whatever it is, for fisheries wardens, the veterans' privilege does apply?

Mr. MACLEAN (*Queens*): Yes.

The CHAIRMAN: Are there any further questions on item 136?

Mr. ROBICHAUD: I have one more question in respect of conservation. In previous years on different occasions, I have brought to the attention of the department the situation in the Bay of Chaleur area in respect to operation of draggers and shore fishermen.

We have on the north side of the Bay of Chaleur, from Petit Rocher to Green Point, about 20 or 30 boats, and on the south side, from Maisonnette to Salmon Beach, 50 or 60 boats which do nothing but shore fishing. Those boats are interfered with by draggers operating in the area. They have lost gear. Complaints have been made to the department. Last year I suggested to the committee that definite action should be taken by the department to prevent repetition of such incident. Could Mr. Clark give us a report on what has been done in this connection?

Mr. CLARK: This is a continuing problem, with the number of vessels; and there is a problem between two types of fishing gear. Under the draggers' licence the draggerman is compelled by his licence to stay a certain distance away from any fixed gear. There are times when draggers will go in and cause damage. We try to catch up with this as quickly as we can; but it is impossible to patrol every one of the draggers, particularly in Mr. Robichaud's area where there are many draggers as well as the fixed gear. However, we have tried to take care of this problem in the best way possible. We asked the fixed gear fishermen, when they can identify the vessel which has destroyed their gear, to give us the information to enable us to take action, if a patrol boat is not right on the spot. We have attempted to have the fixed gear fishermen mark their gear so that a draggerman has some chance to avoid the fixed gear; but this has not been taken up by the fixed gear fishermen.

Mr. ROBICHAUD: A suggestion was made that inside a line between Maisonnette and Paspébiac in a certain period, either before November 1 or October 15, that the draggers should not be allowed to operate. Has any consideration been given, or has any discussion taken place between the officials of the province of New Brunswick, the province of Quebec and your department in this respect?

Mr. CLARK: There has been a regulation in effect for some time from Paspébiac across to the other shore. Across that line only small draggers up to 40 feet are allowed to operate. The larger ones are kept out.

Mr. ROBICHAUD: It happens that the small draggers are causing as much damage as the larger ones. As a question of principle, I am wondering whether or not it would be advisable to eliminate the operation of draggers in that area up to a certain date early in the fall.

Mr. CLARK: This is a very difficult problem because we would then be restricting the operations of one class of fishermen against another. From our point of view it is not a question of conservation, but is a matter of the gear. It is a gear war. We get caught in the squeeze.

Mr. CROUSE: How many fishermen own dragging equipment and ships which drag in that area, and how many fixed trolls are there? That is the basis of this questioning. If we had this information we would know who are in the majority.

Mr. ROBICHAUD: On the New Brunswick side there are no fishermen who own draggers residing in that particular area between Maisonnette and Salmon Beach. All the draggers come from outside. There are 16 or 17 of them under 55 or 60 feet which are allowed to operate in that area.

Mr. MACDONALD (*Kings*): I have a problem similar to Mr. Robichaud's, in my constituency in the area east of Souris. We have had a conflict there between the small boat fishermen and the smaller draggers. Could you tell us, if legitimate complaints are made, whether more intensive patrolling could be instituted, or some other measures taken, to smooth the troubled waters?

Mr. CLARK: Mr. Chairman, as I said we do make every attempt with our available facilities in the maritime areas. However, it is a very large coast, taking in the three provinces, and we do not have enough equipment with which to patrol. We are also trying to institute in respect of the draggers and trawl gear fishermen, a process of education. We are trying to be as active as we can in this particular case.

Mr. ROBICHAUD: In connection with this same question, there have been suggestions made in respect of the area concerned, that the small draggers should not be allowed within three miles from shore. If this were done, I would say that 90 per cent of the inshore fishermen's gear would be protected. It is 20 miles across. There is plenty of room for them to drag.

Mr. MACLEAN (*Queens*): If I might comment on this—and I am afraid I cannot do more—there are a tremendous number of points of view in respect of any regulation one can institute. Our difficulty as a department is that usually these things have nothing to do with conservation. We find ourselves in the position of being referees in a gear war; that is about what it amounts to.

I think you know, from your own previous experience, and especially from watching television recently, that a referee is sometimes not very popular with anybody. Nevertheless we try to arrive at some medium position which is reasonably fair to all fishermen, whether they happen to be inshore fishermen or fishermen who are equipped with small or large draggers, as the case may be.

Mr. ROBICHAUD: In this particular case I would suggest, especially for the months of July, August and up to the latter part of September, there should be a small patrol boat, located at say, Grand Anse on the New Brunswick side of the bay, which would patrol the area. I am sure a lot of improvement would result if this were done.

Mr. MACLEAN (*Queens*): We will certainly consider that. During the course of this discussion I have been thinking that if the member of the constituency from which these small draggers come were a member of this committee, we would probably be hearing from him also.

Mr. ROBICHAUD: Most of those small draggers come from my own constituency.

An Hon. MEMBER: You are a brave man.

Mr. ROBICHAUD: I am facing the problem because I had experience myself when I was director of fisheries in New Brunswick and I am familiar with existing conditions.

Mr. MACLEAN (*Queens*): It is something we will be very glad to review in the event some improvement in the situation can be achieved.

The CHAIRMAN: Are there any further questions on item 136?

Mr. DANFORTH: I must apologize for not having been able to be present when the meeting commenced. I have two points which I wish to bring up and I am not sure whether or not they come under this item. If I am out of order, I am sure you will tell me.

Is it the considered opinion of the department that the means now being used and those contemplated in the control of the lamprey eel will bring about a condition satisfactory to the fishermen in the Great Lakes?

My second question is: is a study being made of the effect of the inroads of the smelt fish in the Great Lakes in respect of their effect on the other fish population of the Great Lakes?

Mr. CLARK: On the question of the lamprey eel, this comes under item 136, the International Great Lakes Fishery Commission. If the committee would like a review of the situation, although it is a little complicated, we have Dr. Pritchard here who is director of the conservation and development service of the department and is also chairman of the International Great Lakes Fishery Commission. I think he could give you, in detail, the work of the commission in respect of the lamprey control program.

Dr. A. L. PRITCHARD (*Director, Conservation and Development Service of Fisheries*): Mr. Chairman, the first question which was posed is whether the department is convinced that the methods now in operation will restore the fish that have been wiped out by the lamprey. I think I should answer the question in this way. With the methods in operation, the department is convinced we can control—or we hope we can control—the sea lamprey; but there is another problem, and that is the business of rehabilitating the lake trout. We think we can do this, especially in Lake Superior where we still have left a fair population of lake trout.

The second question had to do with the smelts. As you know under the international commission we are required to recommend a program of investigation of fishes of common interest, and the smelt is certainly one of them. We make these recommendations to the two signatory governments, the federal government on the Canadian side and the United States government on the other side. The research action must be carried out by the agencies, or organizations, responsible for the administration of the fishery. In this case it is the nine states and the province of Ontario.

We are now starting on the research investigations—at least the organizations responsible are—in all the Great Lakes. One problem which is under the most serious consideration is the smelt problem. However, I think I should be perfectly honest in saying we are not approaching this with the idea of whether we can eliminate the smelt and get back the fisheries which were there before. The reason for this is that what most people do not realize is the Great Lakes are changing. I assume you are thinking particularly of Lake Erie where one hears so much about the smelts.

Mr. DANFORTH: Yes.

Dr. PRITCHARD: I think you will realize that a great deal of the area along the shore of the lake is filling in, in the order of about 30,000 tons of silt a day. This changes conditions. In the older days—longer than I care to think—when we used to get white fish and large amounts of trout in Lake Erie, we had a lot of deep water area. The water conditions and the temperatures were different. It may never be possible to put back into such a lake a large population of white fish and trout. This is what we have to

find out; that is, whether we have to live with such things as the spiny rayed fish like the blue pickerel and the yellow pickerel, or whether in fact we will eventually develop in there a southern fish like the crappie and the bass.

All I can say is that research is now underway and the area of research—the area of responsibility—has been worked out. The states and the province of Ontario and the two federal governments are all now concentrating on the main problem of trying to avoid overlapping. Does that answer your question?

Mr. DANFORTH: Yes. That is quite satisfactory.

Mr. CLARK: If I might add to that, on the Lake Erie question, in addition to what Dr. Pritchard said on the biological side, the department is now engaged in a program on Lake Erie for the catching and utilization on a year-round basis of the smelts. There is a market for smelts.

Mr. CARTER: There are seven commissions listed on page 206. I would like to know which of those commissions deal with the Atlantic seal fishery.

Mr. MACLEAN (*Queens*): There are not any. The Atlantic seal fishery is not covered by an international treaty.

Mr. CARTER: It is an international problem, because the Norwegians prosecute the seal industry in the same area that we do.

Mr. MACLEAN (*Queens*): Yes.

Mr. CARTER: I think there is a problem which would have to be faced some day in the method of taking these seals as well as the conservation of them.

Mr. MACLEAN (*Queens*): Perhaps the deputy minister would say a word on that.

Mr. CLARK: As the minister has said, there is not yet an international treaty on the sealing industry or the seal population on the Atlantic coast. However, for the past several years we have been studying the situation and assembling data of the seal populations on the Atlantic coast. Just recently, in the past couple of weeks, we have completed another aerial survey of the seal herds on the Atlantic coast. All this accumulated data is designed so that it will be available when it is propitious to sit down and discuss it with the Norwegians and the U.S.S.R.—because they are interested, not on our side, but on the other side of the Atlantic.

Mr. CARTER: Do we have a date for the commencement of the seal fishery?

Mr. CLARK: Yes.

Mr. CARTER: The Norwegians either have no date or have a different date.

Mr. CLARK: No, the opening date for sealing on the Atlantic coast has been fixed by an informal agreement between ourselves and Norway for the past several years and the Norwegians respect it.

Mr. MACDONALD (*Kings*): There are two regions.

Mr. CLARK: Yes, the gulf area and what is called the front.

Mr. TUCKER: The date on the gulf is March 5?

Mr. CLARK: Yes, and March 10 on the front.

Mr. MACDONALD (*Kings*): The Norwegians seem to be able to get in on both seasons. They seem to be able to capitalize on the two seasonal dates.

Mr. CLARK: So do our sealers. There is nothing to prevent our sealers doing the same thing the Norwegians do.

Mr. CARTER: Has there been any consultation held with Norway or has any thought been given to setting up conditions for the method of slaughtering seals? We have a bill now in respect of humane slaughter of animals. That is bound to have some impact on the method of taking seals.

Mr. CLARK: It has been discussed in the informal discussions with the Norwegians. If we reach the stage of formal discussions, no doubt the methods of killing will also be considered.

The CHAIRMAN: It is eleven o'clock. We will adjourn until Tuesday at eleven o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MARINE AND FISHERIES

Chairman: ROLAND L. ENGLISH, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 4

Main Estimates (1960)—Department of Fisheries

TUESDAY, APRIL 14, 1959



WITNESSES:

Honourable J. Angus MacLean, Minister of Fisheries; Mr. G. R. Clark, Deputy Minister and Dr. J. L. Kask, Chairman, Fisheries Research Board of Canada.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

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Stewart
Tucker—35.

(Quorum 10)

Antonio Plouffe,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, April 14, 1959.

(5)

The Standing Committee on Marine and Fisheries met this day at 11.00 o'clock a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Anderson, Batten, Carter, Crouse, Danforth, English, Howard, Keays, Legere, Macdonald (*Kings*), MacLellan, Matthews, McGrath, McLennan, McPhillips, McQuillan, McWilliam, Morris, Noble, O'Leary, Pickersgill, Robichaud, Stefanson, Stewart and Tucker. (25)

In attendance: From the Department of Fisheries: Honourable J. Angus MacLean, Minister; Mr. Lowell A. S. Allen, Executive Assistant; Mr. G. R. Clark, Deputy Minister; Mr. S. V. Ozere, Assistant Deputy Minister; Dr. W. M. Sprules, Special Assistant to the Deputy Minister; Dr. J. L. Kask, Chairman, Fisheries Research Board; Mr. J. J. Lamb, Director, Administrative Service; Dr. A. L. Pritchard, Director, Conservation and Development Service; Messrs. H. C. L. Ransom, Executive Director, Fisheries Prices Support Board; W. C. MacKenzie, Director, Economics Service; L. S. Bradbury, Director, Industrial Development Service; T. H. Turner, Director, Information and Educational Service; E. B. Young, Assistant Director, Conservation and Development Service; J. G. Carton, Departmental Solicitor; J. A. Albert, Chief, Financial and Stores Branch; W. R. Hourston, Chief, Fish Culture, Development Branch; R. Hart and W. Snaith, Industrial Development Service; H. A. Wilson, Fisheries Research Board; O. C. Young, Assistant Chairman, Fisheries Research Board; J. C. Hutchison, Departmental Purchasing Agent; and Mr. G. G. Anderson, Assistant Director, Inspection and Consumer Service.

The Committee continued its study of the Main Estimates of the Department of Fisheries.

Items 136-142—*Special Appropriations*, were called.

The Minister and the Deputy Minister were questioned.

Mr. H. C. L. Ransom assisted the Minister on Item 139.

A table, referred to by Mr. Clark, showing subsidy payments for salt to fishermen and fish plants was ordered printed as an Appendix. (*See Appendix I to this day's evidence.*)

Items 136 to 142 were approved.

Items 143 to 145—*Fisheries Research Board of Canada* were called.

The Minister introduced Dr. J. L. Kask who was examined.

Mr. Howard paid tribute to Dr. Kask and to his officials.

Items 143 to 145 were approved.

At 12.25 o'clock p.m. the Committee adjourned to the call of the Chair.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

EVIDENCE

TUESDAY, April 14, 1959.

The CHAIRMAN: Good morning, gentlemen. We now have a quorum. We are going to continue the study of items 136 to 142 inclusive.

Item 136 agreed to.

The CHAIRMAN: We will now deal with item 137.

Mr. ROBICHAUD: Mr. Chairman, in connection with the Newfoundland bait service, could the deputy minister explain why it is limited to Newfoundland? We have similar conditions along our shores. In certain sections we have shore fishermen who are long distances from cold storage plants and for several months during the fishing season they are faced with a shortage of bait. It seems to me that if the same policy could be applied to some other sections, it would be to the advantage of the fishermen.

Mr. G. R. CLARK (*Deputy Minister, Department of Fisheries*): Mr. Chairman, the bait service in Newfoundland is an operation which was taken over by the federal government at the time of union with Newfoundland ten years ago. There had been a bait service operation by the commission of government and the federal government took over this service as part of the terms of union. So, therefore, under those terms of union the federal government, through the Department of Fisheries, has continued to operate the Newfoundland bait service.

In the maritimes area the department has also had a system of giving financial assistance to bait freezing and storing plants for some years; this is the type of assistance which is available in the maritime provinces. I might say too, Mr. Chairman, in connection with the bait facilities in the maritimes area there are many private fish processing plants who do handle and store bait for the fishermen.

Mr. ROBICHAUD: I understand, Mr. Chairman, that inter alia the only way for the maritime provinces to get assistance for cold storage or for the storage of bait is where the cold storage plant is already in existence. But I am wondering if it would not be possible for the government or the department to subsidize small units similar to those which are in Newfoundland. Has any consideration been given to this project?

Mr. CLARK: I think, Mr. Chairman, the question gets into the realm of policy therefore I am not in a position to answer the question.

Hon. J. ANGUS MACLEAN (*Minister of Fisheries*): Mr. Chairman, Mr. Clark the deputy minister has given you an outline of what the situation is. As he said, Newfoundland, under the commission of government, had a service to provide bait to the fishermen in the outports of Newfoundland. When Newfoundland came into confederation at the time of union, one of the agreements was that the federal Department of Fisheries would take over the Newfoundland bait service and continue to operate it as it has been operated before. Now, no such service as that was ever provided by the federal government in any other part of Canada. As Mr. Clark pointed out, there is a subsidy given for bait freezing and storage plants in the maritime provinces which agree to provide bait to the fishermen in the area.

Your suggestion is one that could be looked into with a view to seeing what could be done in improving the bait service in the maritimes. However, I would like to point out that the situation is not quite comparable for various reasons. In Newfoundland, transportation is a very difficult thing in many

areas. The bait depots have to be supplied by a refrigeration vessel. It is almost impossible for the local people or any local enterprise to handle bait commercially in many areas, even if they wish to. A similar condition does not exist in the maritimes to the same extent. However, I do appreciate there are areas where the fishermen have difficulties in obtaining bait; and I would be very pleased to have any suggestions that any members of the committee from the maritimes have in this connection. I would like to be appraised of conditions of this sort which exist in their ridings, in the hope that some feasible method could be evolved which would meet the problem and yet would not be as expensive as the system in Newfoundland, which admittedly is necessary. But it is a very large operation and one that loses quite a lot of money for us every year.

Mr. ROBICHAUD: What I have in mind, Mr. Chairman, is small units which cost in the vicinity of \$10,000 to \$15,000, where they could be taken from a central cold storage plant. I am referring to certain areas in my constituency where we have inshore fishermen who are 35 or 40 miles from cold storage plants and they have to send trucks every day to central plants to get bait. When the bait arrives there they cannot keep it; they have no place to keep it overnight, and the next morning by the time the fishermen get it, say at three or four o'clock in the morning, the bait is thawed out and is soft. I am thinking of the Maissonette, Pigeon Hill, and Miscou Harbour areas and two or three others. If some plan of assistance could be formulated in this regard, it would be a great advantage. I know some of the small dealers might be interested in having units where they could store from 10,000 to 20,000 pounds of bait. In this way, when they sent a truck to the main cold storage plant, they would have facilities on arrival to keep the bait.

Mr. MACLEAN (*Queens*): As the committee knows in the last year or two, in cooperation with industry, we have developed a small cold storage portable unit on an experimental basis in Newfoundland. We are providing for some more in this year's estimates. We provided four last year. Up to this point they are proving very useful, very practical and successful. We would be very glad to go into the possibilities of seeing what could be done in isolated places in other areas, as these units now appear to be a much more practical solution in these smaller communities than the old fashioned bait holding units which formerly existed in Newfoundland. In addition, I would like to say to anyone who might be contemplating installing some sort of small and relatively inexpensive unit of this sort on a commercial basis, that the facilities of the department from a technical advisory point of view would be available.

Mr. MACDONALD (*Kings*): Mr. Chairman, did I understand the deputy minister to say that assistance is provided only for facilities already constructed? Is there assistance given for the construction of bait storage or holding units?

Mr. CLARK: I did not say that. I think it was Mr. Robichaud who suggested it, but the point is if a person is going to build a cold storage or a plant, then he can at the same time apply for the bait freezer subsidy. It is not confined to existing plants.

Mr. ROBICHAUD: It has to be in connection with a cold storage plant?

Mr. CLARK: Yes.

Mr. ROBICHAUD: It cannot be limited to a storage room for bait only?

Mr. CLARK: No.

Mr. PICKERSGILL: Is that assistance given under the Cold Storage Act?

Mr. CLARK: No, it is under the regulations of the Department of Fisheries; the Cold Storage Act is one administered by the Department of Agriculture.

Mr. PICKERSGILL: One can apply under the Cold Storage Act as well if the cold storage is for fishery purposes.

Mr. MACLEAN (*Queens*): Yes, if they meet the requirements of the Act. Of course, the requirements are not administered by this department and I am not as familiar with them as perhaps I should be. There are certain requirements that must be adhered to before a builder of a cold storage facility can qualify for assistance under that act.

Mr. PICKERSGILL: In that regard, I wonder if the minister would consider—and I am not expecting him to answer this right now—whether it might not be in the real interest of the fisheries if some arrangement were made under the Transfer of Duties Act and so on so that in respect of the Cold Storage Act when it applies to fisheries the Minister of Fisheries would be the minister responsible. I think a great many of us feel we would get more sympathy from the Minister of Fisheries than from the Minister of Agriculture. I am not reflecting on the Minister of Agriculture when I say that. I merely suggest most people in Newfoundland think that in the present Minister of Fisheries—and I am not one who very often passes compliments to my political opponents—we have someone who is genuinely interested in the fisherman, no matter to what party he may belong or what province he is in. There is no doubt that the improvements which he described in the bait service in Newfoundland by way of these experimental freezers, which we all hope are going to work out and be a success, have caught the imagination of the fishermen in Newfoundland. I have had much more correspondence about these things than any other aspect of the fisheries except, of course, the failure of the fisheries in the last year. I have one or two questions to ask when it comes to my turn; but I am hopeful this program is going to be expanded very rapidly.

Mr. HOWARD: I would like to add my remarks to those of Mr. Pickersgill with respect to assistance or subsidies toward the construction of cold storage facilities, as these facilities are required for the storing of fisheries products. As the minister knows, I have had a small amount of correspondence with him about this; I have had also some discussion with the Minister of Agriculture. Up until the middle of last year there was a provision for a subsidy from the Department of Agriculture for cold storage facilities to a maximum amount of one-third of the cost. In the middle of last year, a ceiling of \$50,000 was placed on the amount of the subsidy, so it was in effect one-third or \$50,000, whichever was the lesser of the two. We attempted to get some information from the Minister of Agriculture as to the reason for the placing of this \$50,000 ceiling on the subsidy for cold storage facilities. As I understood it, his answer was that after a survey of the cold storage facilities available in Canada, they found that the percentage of occupancy or the percentage of places used was low and ranged down to approximately 50 per cent in some cases. We also attempted to find out what differentiation there was in the percentage of occupancy as between cold storage facilities used for fisheries products and those used for agricultural commodities.

I posed the question to the Minister of Agriculture and I would like to relate briefly some of the contents of his answer, which is in *Hansard*. He pointed out that there were in existence 249 warehouses storing in the main fish and fish products, as compared with 1,169 storing agricultural products, and 855 classified as general—that is, they store all sorts of things. But the ratio is pretty close to eight to one of agricultural products facilities to fisheries products facilities. We attempted to find further what the percentage of occupancy of these facilities was as between agricultural products and

fisheries products; that information was not available. I know the minister's answer was not that the Department of Agriculture refused voluntary confidential reports showing the percentage of occupancy, which represented about one-third of the refrigerated space in Canada; and in any attempts I have made to find out the percentage of occupancy of fishery products cold storage facilities as compared with agricultural products cold storage facilities, I have been unable to find the information. So I am afraid what has happened is that the Department of Agriculture has placed this limitation of \$50,000 in view of the ratio of eight to one and has given scant consideration to providing fisheries products cold storage facilities, which is a discriminatory action in so far as facilities required for fish and fish products. I would like to see, as I am sure Mr. Pickersgill and others would, a change in administration or a transfer of duties or jurisdiction of the provisions for subsidy under the Cold Storage Act as they apply to fisheries products to the Department of Fisheries. This may necessitate some transfer of money or allocation of funds from the Department of Agriculture to the Department of Fisheries. But I am quite sure if such a transfer was made and if the minister had under his jurisdiction the administration of subsidies towards the building of public cold storage facilities for fisheries products, the fisheries people, the fishermen themselves and the industry would derive more benefits from it than they do under the Department of Agriculture. We would then look at it solely in the light of facilities required for fisheries products and it would not be cluttered up by considering them all in one lump, which would include 2,000 odd agricultural products warehouses. If the ratio is eight to one, the Department of Agriculture would be concerned primarily with agriculture and storage for agricultural products and the fisheries products would not receive the attention they should. I would like to see this transfer, and I would appreciate it if we could have some indication from the minister that steps have already been taken to make this change, or that they will be taken in the future. In this way the fisheries people will get the type of consideration that they deserve and their needs and desires will not be lost.

Mr. MACLEAN (*Queens*): Mr. Chairman, I agree with Mr. Howard that when a relatively small item is bulked with a large one, the total picture may not reflect statistically the situation with regard to the smaller segment. Of course, I am not in a position to give an answer at the present time to the suggestion. However, I can say that it certainly will be considered. I appreciate the members of the committee raising this question because it appears to have merit which at least makes it worthy of consideration.

Mr. PICKERSGILL: I wonder if we could have an explanation at this time in regard to the decrease in the item. I suspect I know what it is.

Mr. MACLEAN (*Queens*): It would be accounted for by the fact that the bait unit at Bonavista is nearing completion and much of the expenditure for the machinery and so forth was made in the last fiscal year.

Mr. PICKERSGILL: Could the minister say how near completion the unit is? Has he a recent progress report?

Mr. MACLEAN (*Queens*): I have not, but we hope it will be in operation in July.

Mr. CROUSE: The question raised by Mr. Robichaud concerning the need for this service in his constituency brought to my mind the question of this bait service, because we are hearing a great deal of propaganda today about the lack of consideration by the federal government regarding the needs of the province of Newfoundland. Would the Minister of Fisheries inform the committee if this amount of \$435,560, which is in the form of a subsidy or grant, is available only to Newfoundland, or is it to be made available to Nova

Scotia, New Brunswick and Prince Edward Island, who are also interested in the fisheries, and where it appears there is a definite need, especially in the New Brunswick area.

Mr. PICKERSGILL: I think everyone in Newfoundland would be very happy to see this service extended to the other Atlantic provinces. It is, of course, a right that Newfoundland has under the constitution, as the minister pointed out; but I think we would feel that all fishermen should be treated alike. We would like to see it extended, where there is a need, to all the maritime provinces. I am sure all members feel that way.

Mr. CROUSE: Just on that point, Mr. Chairman. Mr. Pickersgill stated this was under the terms of union, and I am not questioning that. I am searching for information. We recently heard an announcement in the house by the Minister of Trade and Commerce that the present arrangements to sell saltfish were terminated and the industry was now free to negotiate its own markets. Does the termination of that contract in any way relieve the federal government of its obligation to continue supplying this bait service?

Mr. MACLEAN (*Queens*): There is no relationship between the two. This item applies only to Newfoundland. I might say that fishermen from the mainland purchasing bait in Newfoundland buy it on exactly the same terms as if they live in Newfoundland.

Mr. CROUSE: They have been refused at times, have they not?

Mr. MACLEAN (*Queens*): And so have Newfoundlanders. I think the only reason they have been refused is due to the unavailability of bait. One of the terms of union was the provision of the bait service.

Mr. CROUSE: They are then getting extra consideration in the amount of \$435,560. The province of Newfoundland is getting that extra grant over and above that which is made available to the other provinces.

Mr. PICKERSGILL: Not the province of Newfoundland, the fishermen of Newfoundland.

Mr. CROUSE: I think that is drawing a very fine line. It is an extra assistance to those fishermen.

Mr. MACLEAN (*Queens*): Yes.

Mr. CARTER: I have two or three questions in regard to the new portable bait depots. Could the minister advise us now what the exact cost is likely to be for the smallest unit.

Mr. CLARK: Mr. Chairman, I do not have the exact figures here, but laid down they are costing us in Newfoundland roughly \$6,000 to \$6,500; that is erected and in operation.

Mr. CARTER: And what arrangements are made for the operation of the unit; is it operated voluntarily by the fishermen or is there a paid operator? Under what conditions are they operated?

Mr. CLARK: Mr. Chairman, when we installed the four units last summer as an initial experiment—and they have proved quite successful, as I think has already been pointed out—we attempted to make arrangements with some responsible person in the community to operate the unit on behalf of the community. In some cases, at the outset of the experiment, we paid a nominal monthly salary to the person for looking after it; but we hope to work out an arrangement, once they are in operation on a larger scale, whereby the community itself will take over the actual operation.

Mr. CARTER: Well, that brings me to this point. I think it would be in the interests of the fishermen of Newfoundland and in the interests of the federal government also if some way could be worked out whereby the

fishermen through their cooperatives or through their local federations could own or operate these units for themselves. I would like to see something done along that line. I presume they could use the fishermen's improvement loan plan, if they want to take it; but the banks will not lend the money. But since that has not proved practical, I wonder if grants could not be made available to groups in order that they may own and operate their own units.

Mr. CLARK: I think, Mr. Chairman if I may comment on the first part of Mr. Carter's remarks, we are trying to do exactly what he has suggested, and that is to interest the community itself, whether they have a cooperative in existence or are in the process of forming one. We hope that the bait unit will be a community affair. We are attempting to interest the various people in the community along this very line.

Mr. BATTEN: If these units were to become operative by the community, would they still be serviced by the department as they are now?

Mr. CLARK: Yes, that would be part of the undertaking, because if they became short of supplies we would keep the units in operation by having sufficient supplies delivered through our vessel the Artica.

Mr. CARTER: If it is the intention of the federal government to keep up central depots from which the smaller ones could be supplied, I wonder, in that connection, if I could ask the minister if any consideration has been given or any provision made for the replacement of the Artica?

Mr. MACLEAN (*Queens*): There is no item in this year's estimates toward that end. However, we are conscious of the fact that the Artica is getting very old. It was built in 1917.

Mr. CARTER: A couple of years ago the suggestion was put forward that there is a need for a patrol ship or a coastguard boat in Newfoundland waters. Possibly we could combine these duties and they could act as a supply carrier and also be used for rescue services. Is that receiving any consideration?

Mr. MACLEAN (*Queens*): That would be considered, but I do not think it would be very practical because you would probably end up with it being unsatisfactory on both counts.

Mr. BATTEN: How many of these units are to be built in Newfoundland during the coming season?

Mr. MACLEAN (*Queens*): There will be seven additional ones.

Mr. BATTEN: Have you decided yet where they will be erected?

Mr. MACLEAN (*Queens*): Not as yet. We are taking a survey of locations. As the members are quite aware we are receiving a number of requests for the units. They are a very popular acquisition to many communities.

Mr. ROBICHAUD: In view of the low cost of these units, would the minister consider having one in New Brunswick, say at Maisonnette, the place I mentioned before? There are 35 or 40 boats fishing there and they are a great distance from cold storage plants. I would suggest that one be placed there as an experiment during the coming summer. They could be supplied from a cold storage plant at Caraquet. I know it would prove a great advantage to the local fishermen.

Mr. MACLEAN (*Queens*): We would be very glad to consider that suggestion, and I might say, incidentally, that if such a thing was done it would have to be done under the industrial development vote rather than this one.

Mr. LEGERE: Is this portable unit just for the keeping of bait or does it freeze bait as well?

Mr. MACLEAN (*Queens*): It is a bait holding unit.

Mr. LEGERE: Just for storage?

Mr. MACLEAN (*Queens*): Yes.

Mr. LEGERE: What is the capacity?

Mr. MACLEAN (*Queens*): Twenty thousand pounds.

Mr. PICKERSGILL: I understand that it is not capable of freezing bait.

Mr. MACLEAN (*Queens*): That is correct.

Mr. PICKERSGILL: I think the minister told us last year that the department was also experimenting with motor vehicles, that is trucks, for the transportation of bait to supplement the Artica. What has been your experience with that? I would think it would be a lot cheaper by truck and perhaps a lot more efficient.

Mr. MACLEAN (*Queens*): We are going into that matter right at the moment, where there are roads it will be more flexible and faster; also, I think it will be quite a bit cheaper. But the difficulty is that the areas of operation of trucks in Newfoundland are relatively limited. However, it is increasing.

Mr. PICKERSGILL: Yes, it is a different picture from what it was a year ago. Has the department any trucks at the present time?

Mr. MACLEAN (*Queens*): We have one.

Item 137 agreed to.

The CHAIRMAN: We now come to item 138; are there any questions?

Mr. PICKERSGILL: I wonder if we could be told what this item involves.

Mr. MACLEAN (*Queens*): It is a grant to three educational institutions for the purpose of educating fishermen in the areas concerned. One grant is to Saint Francis Xavier University, one to Ste. Anne de La Pocatiere and one to the University of British Columbia.

Mr. PICKERSGILL: You would not describe these as grants to the province of British Columbia, the province of Quebec and the province of Nova Scotia; nor would I.

Mr. MACLEAN (*Queens*): No, they are grants to these educational institutions.

Item 138 agreed to.

The CHAIRMAN: Item 139 is next.

Mr. HOWARD: I wonder if the other members and I could have some indication of the basis for this item. Is there a base price? Does it operate similar to the agricultural products?

Mr. MACLEAN (*Queens*): No, not in the same way as the present agricultural legislation, but it operates very similarly to the former agricultural legislation. There is an advisory board. The fisheries prices support board consists of persons from the industry. For example, Mr. Harding from Prince Rupert is one of the members. They meet from time to time and review the situation and advise the government as to whether or not action should be taken under this act. I might say in addition that the salt assistance grant to fishermen and companies who produce saltfish for certain markets is also administered by the fisheries prices support board, and the administrative costs of this come under this vote.

Mr. HOWARD: I assume that a level of so much a pound is set for a certain type of fish and if the market price falls below that, you make up the difference under this act.

Mr. MACLEAN (*Queens*): Well, there are various ways in which the act may operate. One concerns deficiency payments; another is bulk purchase of a commodity that is in surplus.

Mr. HOWARD: Do you make payments to fishermen themselves?

Mr. MACLEAN (*Queens*): Yes, under the deficiency payment system.

Mr. HOWARD: You should make known to your colleague your views so far as deficiency payments are concerned. Has this applied to British Columbia to any extent?

Mr. MACLEAN (*Queens*): No, I do not think it has ever operated in British Columbia. The fisheries prices there have been relatively good and the main production, as you well know, in British Columbia is types of fish products that command a fairly good price on the world markets.

Mr. MORRIS: How often has this act, which has been in force for eleven years, been applied?

Mr. MACLEAN (*Queens*): It has been applied for some types of products for three or four different years.

Mr. MORRIS: The last time the act was implemented under either of these alternative methods, bulk purchase or payment of a deficiency, between an agreed price and the price of the market at the time, was in 1952. Is that correct?

Mr. MACLEAN (*Queens*): I think so.

Mr. CROUSE: Does this apply only to saltfish?

Mr. MACLEAN (*Queens*): No, to anything.

Mr. CROUSE: Salt fish and fresh fish?

Mr. MACLEAN (*Queens*): It can apply to any.

Mr. CROUSE: Who decides the basic price in regard to fresh fish, for example, and the various species?

Mr. MACLEAN (*Queens*): The board only operates when the price for any particular product becomes a distress price, and when a very acute situation arises in the industry. The board then advise the government as to what action they feel would be most suitable.

The board meets from time to time, reviews the whole marketing situation and reports on any acutely unsatisfactory marketing condition that they feel might require action under the act.

Mr. CROUSE: Who makes up the board?

Mr. MACLEAN (*Queens*): The board consists of Mr. Mifflin from Newfoundland, Mr. Lee from Halifax, Mr. Desourdy from Quebec, Mr. Harding from Prince Rupert and Mr. Millerd from Vancouver.

Mr. CROUSE: They are all nominated by industry?

Mr. MACLEAN (*Queens*): They are appointed by the government but on the advice of industry. We seek their advice in regard to suitable appointees. The chairman of the fisheries prices support board is Mr. McArthur. Unfortunately, he is not here at the moment; he is on loan as a technical adviser to the government of Southern Ireland for a couple of months.

Mr. MORRIS: Has the governor in council during the past years of operation of this act, or presently, considered that perhaps the representation from the fisheries price support board might come seemingly from the fishermen's groups themselves. The present composition of the board seems to be from the fishing industry, that is those gentlemen who are engaged in the purchase of fish from commercial fishermen.

Mr. MACLEAN (*Queens*): Your assumption is not completely correct. At least two of the men are representatives of fishermen's cooperatives; they are Mr. Desourdy and Mr. Harding. All phases of the industry are represented.

Mr. STEWART: Has any consideration been given to paying support to the bloater industry? Last year on the island of Grand Manan there were 50,000 boxes unsold.

Mr. MACLEAN (*Queens*): On one occasion in 1951 there was prices support for the bloater industry. This is something that has been brought to my attention recently by the member for Magdalene Islands and others. The situation will be watched very closely.

Mr. PICKERSGILL: What was the last occasion on which price support was given?

Mr. MACLEAN (*Queens*): 1953.

Mr. NOBLE: Is there anything on the record to show whether fresh water fishermen have benefited by this legislation?

Mr. MACLEAN (*Queens*): I am advised there were two occasions when prices support operated in connection with fresh water fishery products in the inland waters.

Mr. NOBLE: How long ago?

Mr. MACLEAN (*Queens*): It is before 1953; I think it was 1949.

Mr. MACLELLAN: Does the board sit for regular hearings at any regular times?

Mr. MACLEAN (*Queens*): They have annual meetings but they meet from time to time in addition. However, they are not held at any set times, say quarterly or anything like that.

Mr. MORRIS: The expense of the board members in the amount of \$15,000 is just a normal expense per diem, and travelling expenses?

Mr. MACLEAN (*Queens*): That is right.

Mr. MORRIS: I do not wish to delay the proceedings, but would Mr. Clark have a rough idea of the expenditure of federal funds involved in the operation of the Fisheries Prices Support Act? For instance, approximately how much did it cost in 1953-54?

Mr. CLARK: I am sorry, I do not have the figures available to answer your question. However, they can be obtained.

Mr. MORRIS: I am only interested in a rough guidance statement. Quite frankly, I want to make a comparison between that and the total administrative expense under the act, since its inception.

Mr. MACLEAN (*Queens*): It is entirely up to the member, but perhaps in order that this might pass, you could put a question on the order paper to this effect.

Mr. MORRIS: That is quite agreeable, sir.

Mr. MACLEAN (*Queens*): It would be more complete.

Mr. PICKERSGILL: I have one question I would like to put to the minister. He will perhaps recall that something over a year ago the Prime Minister made a speech at Charlottetown. At that time he gave a categorical undertaking to introduce price supports for fish. We have heard practically nothing about that since. I wonder what consideration the government has given to the Prime Minister's undertaking since that date?

Mr. MACLEAN (*Queens*): As a matter of fact, very careful consideration. In this connection, I may say last fall a special meeting of the fisheries prices support board was held. They met first in Halifax and then in St. John's to consider the question of the prices to fishermen in Newfoundland, especially with regard to dry saltfish. The recommendation of the board was to the effect that price support would not be beneficial or would not meet the problem in Newfoundland as it existed last year, because it was not one of price so much as failure of catch; and any system of price support would only put the people who were in a relatively satisfactory condition in a better condition, but would not help the man who failed to catch fish.

The whole purpose of fishery prices support is to try to see that a satisfactory return comes to the man who produces fish. But I think that this does not presume a further stage where you would be in the position of taking the responsibility for providing a reasonable income to the fishermen who fail to produce fish which was, admittedly, through no fault of their own. That was the position in Newfoundland last year. Of course, in addition to this it should not be forgotten—and I do not think it is—that the fishermen of this country have received two additional benefits since this act was introduced. In the case of Newfoundland it was salt assistance.

Mr. PICKERSGILL: Does salt assistance not apply generally?

Mr. MACLEAN (*Queens*): Yes, but only in the Atlantic provinces, and the product to which it applies is chiefly in Newfoundland. Of course, the other one, which applies to the whole country, is unemployment insurance.

Item 139 agreed to.

The CHAIRMAN: Gentlemen, we now come to item 140; are there any questions?

Mr. PICKERSGILL: Could I ask the minister why this is reduced by a quarter of a million dollars? Is it anticipated that the saltfish product is going to be seriously reduced this year?

Mr. MACLEAN (*Queens*): No. Over the last number of years since this has been in operation there has been a cumulative holdover from previous years. Each vote was voted in such a manner that it could look after the production for that fiscal year and also pay for the outstanding obligations for the previous year. These were gradually accumulating each year, and last year we were roughly \$250,000 behind. The amount of \$850,000 which is shown was voted last year to clean up the backlog. We are now back to what is approximately the requirements for one fiscal year.

Mr. PICKERSGILL: In effect, has the backlog been pretty well cleaned up?

Mr. MACLEAN (*Queens*): Yes.

Mr. CROUSE: What percentage of this \$600,000 is paid to Newfoundland and what percentage goes to Nova Scotia, British Columbia and Prince Edward Island?

Mr. MACLEAN (*Queens*): I will see if we have that data available. I see we have a table here for 1958. By provinces, it is as follows: Newfoundland, \$240,698; Nova Scotia, \$50,000 odd; Prince Edward Island, \$1,629; New Brunswick, \$2,690 and Quebec, \$22,635. That is to individual fishermen and in addition to that paid to fish plants.

Mr. CROUSE: Those first figures were individual figures.

Mr. MACLEAN (*Queens*): Yes. In addition to that there were payments to fish plants in certain circumstances. In that category there was no payment to Newfoundland; Nova Scotia received \$12,447; Prince Edward Island, \$891; New Brunswick, \$2,277; and Quebec, \$13,185.

Mr. STEWART: Could that table be printed as part of the evidence?

Mr. MACLEAN (*Queens*): If the committee is agreeable, yes.

The CHAIRMAN: Is it agreed to print this table as an appendix?
Agreed.

Mr. MORRIS: Before this item carries, might I, as a relatively new member, observe in a spirit of goodwill that this seems to me to be an accomplishment of the former administration and has been of general benefit throughout each year. Certainly that administration did a good thing by bringing it in, and ourselves by continuing it. May I record the hope that continuing consideration will be given to the possibility of introducing this salt assistance as a statutory item rather than as a yearly estimate item.

Mr. MACLEAN (*Queens*): I am afraid that while it might have some benefits, there are some reasons why it would not be too wise a course. For example, one reason is that our good friends to the south watch our legislation very carefully to make sure that we are not subsidizing exports to their markets. This is one of the difficulties so far as the application of the Fisheries Prices Support Act is concerned. It is a very important one. Their legislation is such that dumping duties could immediately apply which would affect not only the product in question but perhaps detrimentally affect our fishery products generally. That is why we are very careful to make sure that no salt assistance is paid to any product which goes to the United States.

Mr. CARTER: Before we finish the item, is there any breakdown showing how much of this is due to saltfish that is dried and pickled fish?

Mr. MACLEAN (*Queens*): We do not have the information available at the moment, Mr. Chairman, but we could attempt to get the member a fairly accurate figure on this. However, it would entail a tremendous amount of work.

Mr. CARTER: It is not my purpose to put you to extra work. I just thought there might be some information available.

Mr. MACLEAN (*Queens*): Unfortunately, there is not.

Item 140 agreed to.

The CHAIRMAN: We now come to item 141; are there any questions?

Mr. CARTER: What research is going on to determine the minimum specifications of vessels used in the fishery? I know there is quite a variety. You can go all the way from chopped timber to ply timber, and a combination of chopped and ply timber. I have a problem in my riding; the fishermen have chosen to forego loans from the provincial loan board because they say the specifications required to become eligible for the loan are not practical. They say they are too heavy, and the boat gets soggy and too cumbersome after a few years. Rather than take advantage of the loan board, they build their own boats to specifications which they have found by practical experience to be satisfactory. Is there any research going on to determine what the minimum requirements should be in that respect?

Mr. MACLEAN (*Queens*): I will ask Mr. Clark to answer that question.

Mr. CLARK: In regard to the particular problem there is a good deal of research going on by the department, in conjunction with the fisheries research board and with the loan boards of the provinces concerned. We have a committee on vessels and gear in the department which is studying this problem. We have had also a great deal of help and a lot of cooperation from the naval architects in the National Research Council. Mr. Chairman, we are hoping to arrive at the point where we can provide the fishermen, or anyone else interested, with an idea of the type of craft which they should build which will serve a particular purpose for the areas in which they are fishing. Over the past number of years, we have been studying the costs involved and the cost of operation of particular vessels.

Mr. CROUSE: Has any thought been given to the abolition of this subsidy and in turn setting up depreciation allowances, increased depreciation allowances, which would in effect place the onus on the owners, thereby being an incentive to the ambitious man to proceed and develop the industry. In effect it is a tax reduction but it does not come out of the general fund as a subsidy.

Mr. MACLEAN (*Queens*): Approximately the same question was asked the other day. The whole matter is under consideration, including the question of accelerated depreciation; but this is one which, of course, would not be the

prerogative of the department to institute, if it were instituted; it is a question of government policy which is under consideration and for which no decision has yet been reached.

Mr. PICKERSGILL: I wonder if I could ask the minister or his deputy what is the greatest length and tonnage for which these subsidies are now provided?

Mr. CLARK: The regulations do not provide that assistance be paid on a tonnage basis, but rather on the length, and the policy up to the present time has been directed toward a vessel of the dragger or long liner type up to 65 feet in length. The rate of subsidy at the present time is \$165 per gross ton.

Mr. PICKERSGILL: In view of the fact that the Department of Trade and Commerce seem to have come back, I wonder if there might be some incentive given to fishermen to come back into the Labrador fishery again? Has any consideration been given to increasing the length of the vessels to which the subsidy would be allowed, for the dual purpose of providing the type of schooner that used to come to Labrador and also providing—and this is just as important—vessels which in the fall will go around the coast and pick up the fish and bring it to the points of export. As the minister knows, there have been some very regrettable losses of schooners in the last year and one in particular that I am thinking of. However, I am not seeking a vessel and I would be ineligible for one under the Senate and House of Commons Act. However, I believe there are others who might be interested in going into this very essential trade to the fisheries, if there was an incentive.

Mr. MACLEAN (*Queens*): On several occasions I have said that the whole matter is under consideration and I suspect perhaps that members of the committee may have begun to suspect this was just an excuse. But in fact it is not, because you will realize from some of the questions that have since been asked that it is a very involved business. There are a tremendous number of considerations and questions that have to be taken into account before a decision can be reached. There are a tremendous number of factors which have to be considered because of the influence any change in policy might have upon them.

Mr. STEWART: Mr. Pickersgill has touched upon the question which I had in mind. We have at Beaver Harbour a cold storage plant capable of putting up 20 million pounds of fish a year. The operators of that plant have found they must acquire larger boats to get out of the Bay of Fundy. Has any consideration been given by the government in regard to making available a subsidy for their boats?

Mr. MACLEAN (*Queens*): That is very actively being considered. It is not only just a matter of size; it is how it would apply and whether the rate should be a sliding one or should be increased by degrees for certain sizes, type of construction and many other factors.

Mr. HOWARD: The minister would not want to leave the committee with the impression that sometimes he uses the phrase "under consideration" merely as an excuse; but if he does, I wish he would indicate to us when it is under consideration and when it is an excuse.

Mr. PICKERSGILL: If I may interrupt, when the minister says something is under consideration, most of us know it is under consideration.

Mr. HOWARD: You will notice that I contained myself from laughing a little bit.

Mr. PICKERSGILL: Perhaps he was thinking of some of his colleagues.

Mr. HOWARD: I wonder if the minister would tell me if there is a basis of application. This is a subsidy; this is a grant in aid of construction. Could the minister tell me whether this is confined to any geographical area or applies all across the country?

Mr. MACLEAN (*Queens*): It applies only on the east coast at the present time.

Mr. HOWARD: I am quite sure if you would like to extend it, there would not be any argument.

Mr. MACLEAN (*Queens*): We are conscious of that fact as well. This is one of the complications involved. I might say that in the first instance this subsidy was introduced during the war to stimulate the production of food on the east coast where there was a great reservoir of fish resources which were not being sufficiently exploited. It was at a time when food was in short supply. The situation on the east coast is entirely different to that on the west coast. The resources on the west coast were being exploited almost to a maximum extent so far as the more valuable species are concerned and there was no shortage of potential production on the west coast so far as food is concerned. When you get into a food surplus situation the factors are entirely different, and complicate the whole picture.

Mr. LEGERE: You mentioned a figure of 65 feet in length; just where does it start?

Mr. MACLEAN (*Queens*): There is a minimum of 45 feet.

Item 141 agreed to.

The CHAIRMAN: Item 142 is next.

Mr. CARTER: May I ask how many units you expect out of this amount?

Mr. MACLEAN (*Queens*): The maximum allowance to any one unit is \$10,000, so you can only have three at the maximum. On some occasions they do not qualify for the maximum, so you may get four or even five.

Mr. CARTER: The smallness of this allocation indicates that not very much advantage is being taken out of it.

Mr. MACLEAN (*Queens*): The explanation is that over the years the problem is being met and the demand is decreasing; but cumulatively in the maritimes since this scheme was brought into effect, there have been a great number of grants made and although the money was voted for these facilities in previous years, they are still in operation. As a matter of fact they have to guarantee ten years' operation to be eligible for the grant.

Mr. CARTER: Could the minister say how much was actually spent last year?

Mr. MACLEAN (*Queens*): The full amount, \$30,000.

Mr. ROBICHAUD: How many units?

Mr. MACLEAN (*Queens*): Three.

Mr. CARTER: It was my understanding that one of the reasons that more advantage is not taken of this is due to the fact the operator who wishes to get this grant must build his unit first and then have it inspected. He has to wait a considerable time, perhaps a year or two, before he can get his refund. Due to the red tape involved, they do not bother to take advantage of it; they prefer to go ahead without it.

Mr. MACLEAN (*Queens*): In recent years there has been no shortage of takers on this vote. I think there may have been a certain amount lapsed in the earlier years. For example, in 1948-49 there was only \$4,000 taken up and \$46,000 lapsed. There was a total of \$50,000. But then it increased over the years. In most years it increased. For example, in 1958-59 we gave you a figure of \$30,000; that is with a nil lapse. I should have corrected myself there. This figure is not absolutely accurate because this is a forecast; the bookkeeping for the last fiscal year is not complete as yet. However, we have applications pending and the lapse in this vote is very small.

Mr. LEGERE: Is this bait freezing assistance primarily for ground fishing purposes?

Mr. MACLEAN (*Queens*): No, it includes bait for fishing any commercial species.

Mr. LEGERE: Also for lobster fishing?

Mr. MACLEAN (*Queens*): Yes.

Mr. HOWARD: I imagine I can raise this under this item again because there is an indication of an appropriation which might be returned by supplementary estimates. I understand that Mr. Clark, along with others from his department, are going out to the west coast shortly. Is it tomorrow?

Mr. CLARK: Thursday.

Mr. HOWARD: One of the things that will be discussed there is the question of the destruction of dogfish and other predators, I am primarily interested in the dogfish killing program. We are assuming—and I hope this is not the case—that the department will decide not to proceed by supplementary vote or supplementary estimates for an additional amount of money in this present fiscal year for dogfish control. I am wondering whether we will have an opportunity to have a review given to us by Mr. Clark. Could we have an indication of when you might be back, sir?

Mr. MACLEAN (*Queens*): It will be some time before Mr. Clark is back. I am afraid it will be impossible before this committee completes its work. However, we certainly will be glad to supply any information, directly or when the estimates are before the committee of the whole.

Mr. HOWARD: I hope there will be a supplementary estimate in which case we will be able to deal with it.

Mr. MACLEAN (*Queens*): It can be taken up under the first item in the house in any case.

Mr. HOWARD: That is fine.

Mr. O'LEARY: Who may qualify as an operator on one of those units?

Mr. MACLEAN (*Queens*): I beg your pardon?

Mr. O'LEARY: Who may qualify as an operator?

Mr. MACLEAN (*Queens*): Anybody who has the facilities. One of the problems here is that we try to spread these around so that they are evenly distributed. In other words, if there is a grant already given in some fishing village and bait is available from that source to all the fishermen in that community, then naturally we try to meet other demands for this grant in other areas before we would come back to that particular place and give a similar grant to a second operator in that particular town.

Mr. O'LEARY: Is there any defined distance away?

Mr. MACLEAN (*Queens*): No—I am sorry. I thought you meant between separate places. I was thinking of the concept of 50 miles or something like that. There is a small limitation. It is something in the order of 5 miles, I think.

Mr. ROBICHAUD: I would like to clarify a statement made earlier. Such assistance for bait and freezing storage has to be in connection with the existing cold storage or new cold storage being built but it cannot be bait freezing storage by itself.

Mr. MACLEAN (*Queens*): That is correct.

Mr. PICKERSGILL: What is the reason for that?

Mr. MACLEAN (*Queens*): I think the reason is that to build a cold storage just for the supplying of bait alone would require such a large subsidy from someone that it would not be a very practical situation.

Item agreed to.

The CHAIRMAN: Now, gentlemen, we have reached the fourth group of items, 143, 144 and 145.

FISHERIES RESEARCH BOARD OF CANADA

143. Headquarters Administration	\$ 184,420
144. Operation and Maintenance, including an amount of \$50,000 for contributions towards Fisheries Research and for Scholarships	\$3,950,565
145. Construction or Acquisition of Buildings, Works, Land and Equipment..	\$ 942,130

Mr. MACLEAN (*Queens*): Mr. Chairman and gentlemen, this next item is the fisheries research board. I think you all know Dr. Kask who is seated next to the deputy minister. He is the chairman of the fisheries research board. Any questions will be answered, we hope, by one of the three of us.

Mr. HOWARD: I would first like to pay a tribute to Dr. Kask and his associates on the fisheries research board for the excellent work they have done over the years. I am sure they will continue to do so in the future.

I would also like to say I was very pleased to hear the minister at the luncheon of the Fisheries Council of Canada say somewhat the same things and to also express his attitude that the fisheries research board of Canada is considered in the highest possible degree by other countries. Those are primarily the reasons why I say we should express our appreciation for the work of Dr. Kask and those associated with him on the fisheries research board.

I have just one or two specific things about which I wish to ask. One has to do with the annual meeting of the board. I understand they are closed to the public. I may be incorrect in that assumption. If they are in fact closed to the public, I wonder if we could have an explanation as to why that is so?

Dr. J. L. KASK (*Chairman, Fisheries Research Board of Canada*): The annual meetings of the fisheries research board are not closed to the public although we do have in camera meetings which have to do only with internal administration. The meetings are never very widely attended but usually there are representatives present from the industry and Mr. O'Brien, the manager of the Fisheries Council of Canada is usually there. They are all welcome to stay as long as they like to hear the program of the research board discussed. There is nothing secret about the discussions.

Mr. HOWARD: I was not at the last annual meeting, but I was at the one previous held in the Chateau. I must have got there at the time you were having an in camera meeting because I was informed I could not go in. I assumed they were all closed meetings. I am pleased to hear they are not.

Could Dr. Kask give us some information as to what research work has been done and what results there have been in respect of the commercial use of dogfish.

Dr. KASK: The dogfish is very widely used as a medium of food in many areas of the world. For instance, in Japan there is a heavy demand and they are actually interested in importing them. In the United Kingdom dogfish is used largely in the fish and chips trade. There is no demand for dogfish as food in North America. The cost of production is so high it has never yet been commercially feasible as an export item.

We are trying to find what we call auxiliary uses for dogfish. As you know, their livers were at one time quite valuable as a vitamin source. When a cheaper source was found in synthetics this became no longer a means of turning the dogfish into money. However, we are working on the possibility of developing special products from the dogfish from the technological point

of view and from the biological point of view in order to see if we can reduce the numbers so that they will become less of a nuisance to the fishermen who are carrying on other fishing.

I think the industry should know that in order to reduce a population of animals like the dogfish, and keep them at a low level, is a subsidized sort of thing, very expensive, and must be continued. For instance, on the Pacific coast we estimate that about 40 thousand tons annually would be required to be taken to reduce them to the level where they would not be of a great nuisance to fishermen in the area, and that would have to be done on a continuing basis.

Mr. HOWARD: Dr. Kask mentioned Japan as a consumer of dogfish and, in fact, as an importer. I wonder if there is any possibility of our interesting that market as far as our exports are concerned.

Dr. KASK: The economics of the thing are rather out of my field, but my guess would be that the production cost would be almost prohibitive.

Mr. CLARK: If I might comment on that, I was in Japan last fall and at that time I discussed the very matter which Mr. Howard has brought up with some of the Japanese importers of dogfish, but the price they were willing to pay was not sufficient for our fishermen or producers to attempt to export dogfish to Japan.

Mr. ROBICHAUD: Mr. Chairman, I have a problem which I would like to place before the minister and the fisheries research board at this time. I understand that the minister has recently received a request from Gloucester county asking for laboratory facilities. We have in Gloucester a production of 65 to 70 million pounds of fish a year which involves quite a substantial fleet. I know the chambers of commerce at Caraquet and Shippegan have written the minister asking for the establishment of an experimental station in the area. I would like the minister to tell us at this time if any consideration has been given to the request. We understand with the fresh fish inspection which is coming into force this year that there will be a great need for special facilities in the Shippegan and Caraquet area.

Mr. MACLEAN (*Queens*): I can answer you now as far as the inspection phase of such a problem is concerned. It does not directly concern the fisheries research board. I might say that the inspection of fish is done by inspectors who are trained to attain a standard of judgment as to the quality of fish. There is a percentage of checks done every now and again to make sure the inspector's judgment of the quality of the fish remains as standard as we can make it. The total inspection is not done in a scientific laboratory sense. However, we have in Halifax an inspection laboratory. In addition to that we have two mobile laboratories which will be operating chiefly in New Brunswick and Prince Edward Island during the season. Their responsibility is to do scientific tests on fish which may be in doubt as to their quality, and also to make sure that the standard of inspection is maintained at a high level. At the present time we feel confident that the mobile laboratory will meet the problem from the inspection point of view.

Mr. Clark may have something to add to that.

Mr. CLARK: Mr. Chairman, I think the minister has covered the matter quite fully. The representations to which Mr. Robichaud referred have been received by the minister from, I think, the chamber of commerce in that area. We are proposing to see how the operation goes this year with the facilities which the minister has mentioned, the mobile laboratories, which incidentally are very fully equipped. If the need arises after this year's operation I am sure the minister will give consideration to having a laboratory permanently established in that area.

Mr. ROBICHAUD: I believe the minister and Dr. Clark will agree that in view of the heavy production involved in the area there is a need for a permanent local laboratory in addition to the mobile laboratory which I know has been made available in the last few years.

Mr. MACLEAN (*Queens*): We will certainly give this matter sympathetic consideration as far as the inspection of fish is concerned in that area.

Mr. McGRATH: I asked virtually the same question in the committee hearings last year. Have there been any recent experiments in respect of the commercial cannings of caplin?

Dr. KASK: I think to my knowledge there have been no commercial experiments in respect of that species but there have been some small-scale scientific experiments. We are definitely planning on doing something on a larger scale, with a larger variety of uses being sought for that species.

Mr. McGRATH: Is the doctor aware there has been a successful system developed whereby caplin can be canned?

Dr. KASK: Yes. We are quite aware of that.

Mr. LEGERE: I would like to address a question to the fisheries research board concerning the tuna fish in my riding in the Westport area which is considered one of the best areas in the world, but not last year during the tournament. Last year they did not get one tuna fish although the tuna were there in quite considerable numbers. I wonder if the research board could advise us why these fish professed a lack of interest in the bait which was thrown overboard due to the fact that any that were harpooned were found to have nothing inside them.

I wonder if any consideration has been given to research for the purpose of establishing the reason for the non-interest on the part of the tuna in taking the bait, either herring or mackerel, dropped overboard?

Dr. KASK: The tuna fish, like most other animals, has a climate which it prefers to live in. The tuna is a warm water fish. The time it comes into the latitude of Canadian waters is when it happens to be in that part of the gulf stream which comes up to the latitude of Newfoundland. The occurrence of tuna in Canadian waters is a fortuitous matter in the first instance because it is rather a chance operation than one which occurs annually.

The answer to the other part of the question I think would be that the tuna like most other cold-blooded animals have times when they feed and times when they do not feed. It may have been during one of these apathetic periods. The large tuna fisheries off the coast of Mexico and the southern United States are very much dependent on the tuna responding to food, and the reaction of the tuna to food organisms varies with times. So the chances are that this year as on other occasions the fish that were there probably were not taking the bait.

Mr. LEGERE: It has been mentioned that in this area perhaps the scarcity of the herring in the area had a bearing on it. Would it be possible that they would be following the herring schools along?

Dr. KASK: The tunafish has to make a living also and goes where the best living can be made. If the food is not there certainly the tuna will not stay very long.

Mr. STEWART: Am I right that this part of the vote does not apply to the work at St. Andrews?

Mr. MACLEAN (*Queens*): It is under this group of three items.

Mr. STEWART: Could I ask how much was spent at St. Andrews last year in the research field.

Mr. MACLEAN (*Queens*): In research generally?

Mr. STEWART: Through the St. Andrews station?

Dr. KASK: Do you want an approximate figure?

Mr. STEWART: Approximate.

Dr. KASK: Approximately \$1 million.

Mr. BATTEN: Could I ask if Dr. Kask would give us a brief report on the experiments being carried on at Valleyfield, Nova Scotia?

Dr. KASK: I think this would come under the departmental operations.

Mr. MACLEAN (*Queens*): The operation at Valleyfield comes under our industrial development department. Of course, there is very close liaison on scientific problems between the research board and the industrial development service of the department in any cases in which they have a common interest. The Valleyfield station is operated not by the research board but by the industrial development service of the department. What, exactly, was your question?

Mr. STEWART: All I want to know is what are the results of some of the scientific experiments that are being carried on there?

Mr. MACLEAN (*Queens*): I will ask Mr. Clark to give you a resume of that. I am not objecting to the question, but it would have been more properly taken up under a previous item. However, it is closely related to this item, so I will ask Mr. Clark to answer it.

Mr. CLARK: The operations of the experimental plant at Valleyfield, as the minister pointed out, come under the department. Also as the minister pointed out there is very close liaison with the fisheries research board in the work being done there. At this plant we take the results of the research which is done by the fisheries research board and apply them in a commercial or a semicommercial way in the Valleyfield plant. In connection with the projects which we have there, particularly on salted fish and the drying of salted fish to produce a light salted codfish, the work is quite successful.

We are also experimenting, as a result of the work done by the fisheries research board, on the use of refrigerated sea water, and we are also engaged in the packaging in an attempt to prepare a more modern type of package for salted cod and other fish products.

Generally the work is carried on by taking the results of the work done in the laboratories of the fisheries research board, where these projects are of immediate interest to the industry, and applying them on a commercial scale.

Mr. BATTEN: Could Mr. Clark give us any information as to how the quality of the salted fish artificially dried compares with the quality of salted fish sun-dried?

Mr. CLARK: This gets into a very technical matter, because I think it is almost a matter of preference. To try to answer the question I will do it in this way. The artificial drying of salt cod which we have done, and which others in the industry have done, has compared very favourably and is quite acceptable in the markets. Not being a real expert on salt cod, I will not attempt to define the merits as to whether or not it is a better product sun-dried or artificially dried. The main thing, I think, is that we have proven that dry salt cod can be produced artificially and on a uniform basis to give a product which is acceptable to the markets.

Mr. STEWART: I am wondering if any research is being made into the possibility of developing machinery for the bloater industry. The people engaged in that industry tell me they are reaching the stage where they are unable to find competent help. The younger people are not acquiring the skill.

It is like the village blacksmith; they are fast going out of existence. I am wondering if any research is being made into the possibility of developing machines to do the work.

Dr. KASK: To my knowledge, there is nothing specific being done in that. The whole concept of mechanization of fisheries operations is being considered both by the fisheries research board, from a technical viewpoint and from the technical and industrial side by the department. To my knowledge, this specific point has not received any special consideration.

Mr. STEWART: As you probably know, years ago Connors Brothers were in the same position and they developed their own machinery.

Item 143 agreed to.

Mr. BATTEN: On item 144 may I ask how many scholarships are awarded for 1959 under this vote?

Dr. KASK: The fisheries research board subsidized twenty-five thousand dollars' worth of scholarships which are administered through the national research council's scholarship fund.

In 1959 the scholarships have not yet been fully awarded. For 1958 we had eighteen scholarships awarded.

Mr. ROBICHAUD: How many in New Brunswick?

Dr. KASK: I do not think they were geographically significant. They were from across Canada.

Items 144 and 145 agreed to.

The CHAIRMAN: Gentlemen, we will adjourn to the call of the chair.

APPENDIX I

DEPARTMENT OF FISHERIES

SALT SUBSIDY—1958

Individual Fishermen

Provinces	No. of Claims	Amount	Average
Newfoundland	4154	\$240,698.86	\$ 56.76
Nova Scotia	731	50,638.19	69.27
Prince Edward Island ...	60	1,629.03	27.15
New Brunswick	48	2,690.99	56.06
Quebec	303	22,635.60	74.70
	<u>5296</u>	<u>\$318,292.67</u>	
Overall Average			<u>\$ 60.10</u>

Fish Plants

Newfoundland	\$
Nova Scotia	16	12,447.30	777.96
Prince Edward Island ...	2	891.62	445.81
New Brunswick	2	2,277.50	1,138.75
Quebec	11	13,185.46	1,198.68
	<u>31</u>	<u>\$ 28,801.88</u>	
Overall Average			<u>\$ 929.09</u>

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MARINE AND FISHERIES

Chairman: ROLAND L. ENGLISH, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 5

Main Estimates (1960)—Department of Fisheries
INCLUDING

1. Second Report to the House
2. Index of Items

THURSDAY, APRIL 23, 1959
FRIDAY, APRIL 24, 1959

WITNESSES:

Honourable Angus MacLean, Minister of Fisheries; Dr. A. L. Pritchard,
Conservation and Development Branch, Department of Fisheries.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959



STANDING COMMITTEE
ON
MARINE AND FISHERIES

Chairman: Roland L. English, Esq.

Vice-Chairman: Albert DeB. McPhillips, Esq.

Messrs:

Anderson	Howard	Murphy
Batten	Keays	Noble
Bourget	Legere	O'Leary
Browne (<i>Vancouver-</i> <i>Kingsway</i>)	Macdonald (<i>Kings</i>)	Phillips
Carter	MacLellan	Pickersgill
Crouse	Matthews	Robichaud
Danforth	McGrath	Speakman
Drysdale	McLennan	Stefanson
Gillet	McQuillan	Stewart
Granger	McWilliam	Tucker—35.
Grenier	Michaud	
	Morris	

(Quorum 10)

Antonio Plouffe,
Clerk of the Committee.

REPORT TO THE HOUSE

FRIDAY, April 24, 1959.

The Standing Committee on Marine and Fisheries has the honour to present its

SECOND REPORT

Pursuant to its Order of Reference of March 10, 1959, your Committee has considered items 127 to 145 both inclusive, as listed in the Main Estimates for the year ending March 31, 1960, relating the Department of Fisheries.

Your Committee held seven meetings, one of which was devoted to the consideration of a Preliminary Report on Flood Control and Hydro-electric Power in the Fraser River basin in British Columbia, particularly in respect of fisheries and certain relevant aspects referred to in the said report.

This report was tabled in the House of Commons on January 20, 1959, and was placed before the Committee in accordance with an order of reference dated February 9, 1959 giving power to the Committee to call for papers and records.

Your Committee was impressed with the evidence given thereon by the Minister of Fisheries and Dr. A. L. Pritchard, Director of Conservation and Development Service of the Department of Fisheries.

Your Committee recommends that the Government consider the advisability of hastening the re-appointment of the Fraser River Board in conjunction with the Government of British Columbia in order that the said Board achieve its aims, specially with reference to the protection of fisheries in all its aspects.

Your Committee expresses the opinion that no dams should be built on the Fraser River, or any of its tributaries, where such dams will, in the opinion of the Minister of Fisheries, interfere with, or be detrimental to anadromous fish runs.

Your Committee wishes to express its appreciation to the Minister, his deputy and to the departmental officers who were present throughout the proceedings and particularly to those who appeared as witnesses.

Your Committee recommends the approval of the estimates referred.

A copy of the Committee's Minutes of Proceedings and Evidence is appended.

Respectfully submitted.

ROLAND L. ENGLISH,
Chairman.

MINUTES OF PROCEEDINGS

THURSDAY, April 23, 1959.

(6)

The Standing Committee on Marine and Fisheries met this day at 9.30 a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Anderson, Carter, Crouse, Danforth, Drysdale, English, Granger, Howard, Légère, McGrath, McLennan, McPhillips, Morris, Noble, Phillips, Stefanson, and Tucker.—17.

In attendance: From the Department of Fisheries: Honourable J. Angus MacLean, Minister; Mr. Lowell A. S. Allen, Executive Assistant; Mr. S. V. Ozere, Assistant Deputy Minister; Dr. A. L. Pritchard, Director, Conservation and Development Service; Messrs. J. J. Lamb, Director, Administration Service; W. C. MacKenzie, Director, Economics Service; O. C. Young, Assistant Chairman, Fisheries Research Board of Canada; J. G. Carton, Departmental Solicitor; E. B. Young, Assistant Director, Conservation and Development Service; H. C. L. Ransom, Executive Director, Fisheries Prices Support Board; and R. Hart, Industrial Development Service.

Before proceeding to the consideration of items 131 and 132—Field Services—which were allowed to stand (April 9), the Chairman made a statement on the relevancy of the subject matter to be discussed. (*See this day's evidence*).

Items 131 and 132 were called.

The Minister outlined the background of the Preliminary Report on Flood Control and Hydro-electric Power in the Fraser River Basin and introduced Dr. A. L. Pritchard, Director, Conservation and Development Service.

Dr. Pritchard was questioned on the fisheries aspects contained in the above mentioned report.

In the course of the examination, Mr. Howard asked for and obtained the Committee's consent to include in the evidence extracts of a table which appear on page 162 of the Report.

Mr. Howard suggested that the Committee would be well advised to include a recommendation in its report to the House with respect to the Fraser River Board.

Before leaving for a Cabinet meeting, the Minister commended the members of the Committee for the interest they have shown in the affairs of his department. He referred to a proposed luncheon to be held during the month of May in the Test Kitchen of the Department and invited the members of the Committee.

Items 131 and 132 were approved.

Agreed,—That the Chairman report back The Estimates in its Second Report.

The Chairman expressed his thanks to the Minister, his deputy and the witnesses.

At 11.00 o'clock, the Committee adjourned to the call of the Chair.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

FRIDAY, April 24, 1959.

(7)

The Standing Committee on Marine and Fisheries held an executive meeting *in camera* this day at 9.30 o'clock a.m. The Chairman, Mr. Roland English, presided.

Members present: Messrs. Anderson, Browne (*Vancouver-Kingsway*), Crouse, Danforth, Drysdale, English, Granger, Howard, Légère, MacLellan, Matthews, McLennan, McPhillips, McQuillan, Noble, O'Leary, and Tucker.—17.

The Chairman submitted the following report of the Subcommittee on Agenda and Procedure:

THURSDAY, April 23, 1959.

Your Subcommittee on Agenda and Procedure met on April 23rd. All members were present.

Your Subcommittee submits the attached draft report for your consideration.

Respectfully submitted.

ROLAND ENGLISH,
Chairman.

The Committee then proceeded to the consideration of the said draft report.

After discussion, the said draft report was considered paragraph by paragraph, amended and adopted as amended.

Agreed.—That the Chairman present the report as amended as the Committee's Second Report to the House.

At 10.35, the Committee adjourned to the call of the Chair.

Antonio Plouffe,
Assistant Chief Clerk of Committees.

EVIDENCE

THURSDAY, April 23, 1959.

The CHAIRMAN: Gentlemen, I see a quorum.

To date we have considered and approved the main estimates of the Department of Fisheries except items 131 and 132, which were allowed to stand. This was done, you will recall, to permit the discussion of one aspect of a report, namely "Preliminary report on flood control and hydro-electric power in the Fraser river basin". I am now tabling a copy thereof.

In this connection the Clerk of the committee, on my instructions, obtained and had an advance distribution made of copies to members of the committee.

You understand, of course, that any discussion of this report will have to be related to items 131 and 132, and to Fisheries, namely, chapter 6, section 6.2, starting at page 142. Although the Chair does not intend to unduly curtail the discussion, it will rule as irregular and out of order any other references.

We shall now proceed with items 131 and 132 under the heading "Field services".

Our special witness this morning is Dr. A. L. Pritchard, Director of the Conservation and Development Service, Department of Fisheries.

Mr. HOWARD: I would like to raise this matter, Mr. Chairman, upon which I would ask your consideration. You mentioned page 142, starting at chapter 6.2, the reference there being "Fisheries". I wonder whether you would not allow a little deviation from actual consideration of the words in that particular section of the report, because I think there are references in other parts of this report that have a bearing on fish and as to the effect that dams—storage or hydro-electric—will have on spawning grounds. Some of those references are contained in other sections of the report, under "Hydro-electric development". There is some reference, I believe, in that section of the report dealing with flood control.

I was wondering whether you might not relax the limit you have mentioned and allow consideration of the other parts of the report which relate to fisheries.

The CHAIRMAN: I have no objection, as long as the committee agree to it. The minister has a statement to make before any questions are asked.

Mr. J. ANGUS MACLEAN (*Minister of Fisheries*): Mr. Chairman, gentlemen; it occurred to me that perhaps the best way to commence the consideration of this report would be for me to make a brief statement on it and then Dr. Pritchard can carry on and reply to any questions on detail or any other points that you would like to cover.

The Fraser river board was appointed by agreement between the government of Canada and the government of British Columbia to investigate the water resources and requirements of the Fraser river basin and to report its findings with respect to effective regulation of the river system for flood control and power and the resultant effects on migrating fish, silting, erosion and irrigation. It is obvious, therefore, that many of the problems to be investigated are not the responsibility of the Department of Fisheries. In addition, the federal contribution towards the operation of this board was never contained in the estimates of the Department of Fisheries. It would, therefore, be presumptuous of me to endeavour to comment in this committee, on details other than those which involve fisheries.

Fisheries studies have indicated that at the present time the average annual value of commercially caught salmon originating in the Fraser river is approximately \$34,500,000. It has also been calculated that through proper management the value of the commercial fishery might be quadrupled by 1980, over the average in the early fifties. It is thus obvious that the Department of Fisheries would have a vital interest in any such investigation and should accept the responsibility of clearly stating the effects which any proposed developments might have on fisheries. For this reason the department has maintained close collaboration from the time when it suggested as one of the three board members from the federal side, the area director of fisheries for British Columbia.

The preliminary report has analyzed the characteristics of the two largest Fraser river floods on record namely, one in 1894 and one in 1948. The maximum daily flow of the Fraser river at Hope apparently reached 600,000 cfs. in 1894 and this was adopted as the peak of the flood which should be controlled. This design peak was reduced by 4 per cent to 576,000 cfs. to allow for the effect of the diversion of the Nechako river by the ALCAN development. In their present state of repair the dykes of the Fraser valley could contain a peak discharge of 375,000 cfs. In essence, therefore, it was necessary to establish methods of providing for the retention of the regulation of the excess discharge between the designed peak and the safe discharge peak—576,000 cfs.—375,000 cfs. or 201,000 cfs. This, of course, would be accomplished either by building up the dykes or retaining water storage of approximately 10 million acre feet.

The hydro-electric potential of the Fraser river was also assessed and it was pointed out that this amounting to 5,000,000 kilowatts, could be developed in three ways under designated systems 1, 2 and 3. Each of these included main stem dams between Lillooet and Prince George. The second, however, envisaged a 700 foot dam at Moran canyon and a 240 foot dam at Cottonwood canyon.

The fisheries studies on these systems reviewed the complexity of the problems which would be posed by the construction of such dams and included a discussion of certain measures and facilities which might be employed in overcoming some of the difficult problems. It presented some indication of the costs of such facilities and of their probable success. The biological and engineering research to date on the fisheries problems created by multiple water use projects was briefly reviewed. The conclusion was reached that at the present time there was no practicable means of passing salmon over high dams such as those proposed at Moran or Cottonwood canyons. The delay that would result from a series of low dams on the Fraser river below Prince George and on the Thompson, Lilloet and Quesnel rivers would be sufficient to preclude the preservation and extension of all the salmon and steelhead trout runs to the rivers above the dams. At the present time there is no economic or practical device which can be recommended to pass migrants safely down stream at most of the dams. The mortality to seaward migrants would vary from 15 per cent for dams less than 100 feet in height to 70 per cent for dams in the order of 300 feet. Mortalities at dams higher than 300 feet have not been measured but it can be assumed that they would be greater than 70 per cent.

The fisheries section of the report finally lists two groups of dam sites, as follows:

1. Power or storage dams which would have no serious effects on the salmon and steelhead trout populations of the Fraser river. The dams were at the following sites: Cariboo falls; Sandy lake; Isaac lake; Moose river; Murtle lake-Blue river; Angushorne creek; Hobson lake, and near Moose lake.

2. On the basis of present available knowledge and information, storage dams and, under some conditions, power dams at the following sites would have no serious overall effect on the salmon and steelhead trout population of the Fraser river system, provided that the requirements of fisheries are fully considered in the planning stages. Additional studies and surveys would be required at these sites to determine the exact nature of the problems involved and to design satisfactory facilities to overcome these problems.

The dams that fall into this category could be located at: Chehalis lake; Nahatlatch river; Black canyon; Upper willow; Lower McGregor; Grand canyon; Clearwater; Hemp creek; Clearwater-Azure; Helmcken falls; Mitchell lake; Olsson creek, and Clearwater on the Clearwater river.

In view of the fisheries problems which were made clear and accepted, the report of the board indicates that any attempt to implement a scheme which might harm the major salmon areas, no matter how beneficial it might be in other respects, would be subject to delays in implementation. It was, therefore, considered expedient to consider alternatives which would avoid these fisheries problems for the moment rather than to await their solution and to examine the possibility of erecting dams where they would be least objectionable to the fisheries interests, not relaxing in the meantime, efforts to solve the fisheries difficulties.

In other words, the possibility of building dams on the main stem of the Fraser present problems which, with the present state of knowledge, in any event, would preclude the transfer of fish either up or down in adequate numbers. Therefore it was agreed that dams, for the present at least, should be restricted to those areas, in most cases in the upper reaches of the system, where fish are not involved or where the situation is such that fish can get around the obstruction by suitable facilities which can now be built and which have already been proven.

With this in mind four stipulations were drawn up for partial development:

- (1) to provide flood control to non-damaging levels in the lower Fraser valley,
- (2) to form an integral part of a comprehensive plan for the basin in which all the economical power sites would be fully developed,
- (3) to be compatible with maintaining anadromous fish runs,
- (4) to be economically self-supporting through power production.

On this basis, three systems A, B and C were designed to conform as closely as possible with these requirements. As planned these are actually partial developments of the three major plans contemplated under the hydro power sections. Of these three systems (B) contemplates a dam at Cottonwood 190 feet in height and (C) a dam at Cottonwood 240 feet in height. From the fisheries viewpoint these are definitely not attractive because of the difficulties already mentioned in passing fish over high dams.

System (A) involves the following:

System A

- 5 dams on the Clearwater system (storage and power)
- 3 dams on the North Fork of the Quesnel (storage and power)
- 2 dams on the McGregor River (storage and power)
- 1 dam on the outlet of Stuart Lake (storage only)

The report on system A indicated that if the construction of the low dam (22 feet) at Stuart lake was unacceptable to the fisheries interests, then the system could not regulate the flood discharge to within the safe limit of 375,000 c.f.s. It pointed out, however, that if the present dykes in the Fraser

valley were restored to the standards set by the Fraser river dyking board, then the Stuart lake dam could be excluded from system A, and flood protection would be provided. The estimated cost of such restoration is \$4½ million.

To sum up: the system A power project would be 750,000 kilowatts with an estimated cost of \$521 million; annual cost, \$41,730,000; annual value of power produced, \$41,569,000; and the benefit/cost ratio would be .99. This means that it would not be quite self-supporting, although it would be self-supporting all but one per cent.

Insofar as fisheries is concerned if Stuart lake were excluded from system A and the flood control accomplished by strengthening the present dykes, this would be most attractive. There would be some fisheries problems in the Clearwater system where spring and coho salmon spawn in the lower reaches and in the McGregor system where spring salmon spawn. It is felt, however, from experience elsewhere that these might be resolved.

The recommendations of the report insofar as fisheries are concerned are that more intensive and detailed studies should be carried out on these schemes looking towards their implementation. The studies should start from system A which is the least objectionable to fisheries and continue through the others as more solutions for the fisheries problems are evolved. In the meantime, the Department of Fisheries should continue to try to find solutions to problems without any relaxation.

In summary, therefore, the Fraser river board has made a first major attempt to come up with a recommendation for the multiple water use of a large river system. The Department of Fisheries has presented the case for fisheries which has led to an adjustment in the approach recommended and has given rise to a recommendation for investigation of the scheme least objectionable to the fisheries interests, yet suitable for flood control with the production of sufficient power to almost compensate for flood control expenditures.

That is the general outline of the problem, and of what the board considers to be the wisest, most practical and acceptable suggestions for carrying it out.

The CHAIRMAN: Thank you, Mr. Minister. Now, questions are in order.

Mr. HOWARD: First, I would like to express our thanks to the minister for the very comprehensive resumé of the problem, and of the material in the report itself.

I wonder if I might ask a couple of questions about this system A. As I have it here, there is right opposite page 134 a plate number 5-D which relates to system A and which lists the various storage sites, power sites, and dams that are envisaged by this system A, which you say is the least objectionable. But it seems to me that it needs some clarification, because associated with the blue dotted areas along the Fraser and tributaries like the Thompson, and the Chilcotin and so on, it is indicated that they are streams where the salmon travel and spawn. And the only lake or river system that is indicated as being an anadromous fish run, river or lake is Stuart lake which is up in the upper left hand corner, and there is an indication that a power storage site is envisaged there. That is the one which was 21 feet or 22 feet?

Mr. MACLEAN: That is just for storage only.

Mr. HOWARD: It is listed with a blue triangle, and in the lower left hand corner it says that the blue triangles means power and storage sites.

Dr. PRITCHARD: That is right.

Mr. HOWARD: But it is considered to be a storage site only.

Dr. PRITCHARD: That is right.

Mr. HOWARD: Then it should be indicated by a green triangle.

Mr. MACLEAN: Yes, it should.

Mr. HOWARD: That is fine. That is one thing which is out of the way. Then there is one listed by numbers 104 and 185. If you will look across to page 134, you will see that 104 is the name for lower McGregor, while 185 is the name of Olsson creek.

Dr. PRITCHARD: I think I can pre-suppose your question.

Mr. HOWARD: Are those rivers where fish spawn?

Dr. PRITCHARD: These dots running up to the lower McGregor at least show that salmon run only to the mouth. I think I can explain what probably has happened here, if I may, Mr. Howard.

Mr. HOWARD: If you please.

Dr. PRITCHARD: Of course, as you know, the most important salmon in this area that you are talking about in the headwaters, is the sockeye salmon. These blue dots are pretty well limited to the sockeye area. You are quite right to say that the spring salmon do spawn in the lower McGregor, and it is the same down in the North Thompson. Undoubtedly some spring salmon go up the North Thompson. But you will note that the dotted areas are the heavily producing sockeye areas.

Mr. HOWARD: Yes, that is as I gathered it. Numbers 104, 185 and 142, which is on the Clearwater, and number 194 and 141 are numerically lesser dam sites. Is there any indication we could have as to the volume of fish which go up or down, or the number of fish which migrate into these areas?

Dr. PRITCHARD: I am afraid I cannot give you exact numbers, but I would say it was a relatively small number.

Mr. HOWARD: And it is not sockeye?

Dr. PRITCHARD: No.

Mr. HOWARD: There is the spring and steelhead too.

Dr. PRITCHARD: Just the spring and the coho, which is not considered to be a really heavy salmon run. It is one of the smaller runs; and they will, we think, use the North Thompson below Clearwater. But there is that chance there. That is why we feel we can overcome it.

Mr. HOWARD: Do you have any estimate of the number involved, just as a rough guess? It may be in the book somewhere, but it is a terrific thing to wade through and to pick all these out.

Dr. PRITCHARD: I doubt if it is in the book, but I can get those figures for you. I am sure I can. Is that all right?

Mr. HOWARD: I think it would be helpful, yes.

Dr. PRITCHARD: You must remember also that we figure that with the sizes of the dams we can pass the fish.

Mr. HOWARD: With the five dams I am referring to?

Dr. PRITCHARD: Yes, that and the size of the dams and the run involved in the Clearwater. One of our most important problems relates to the Fraser river below Lytton where we have to count on passing three quarters of a million fish a day. And when we get up in the northern Fraser at the Moran site, we have to count on passing hundreds of thousands of fish a day. When we are in a run like this, we are in thousands, actually in tens of thousands, and that makes the passage much easier.

Mr. HOWARD: The Stuart lake dam, as I understand it, is a 30 foot storage dam?

Dr. PRITCHARD: It is 22 feet.

Mr. HOWARD: You would have no problem in passing fish both ways up there?

Dr. PRITCHARD: We do see a problem, and that is why we are very keen on the alternate recommendation, because we feel—and I think that the engineers agree—that the present dyking system has to be brought up to the standard. If they do that, then they will not want the Stuart lake dam, and we would fight for that rather than put it in, although we feel that we could pass them. But there is still a tremendous run of fish there. In some years it has amounted to almost one million.

Mr. HOWARD: The dam, as indicated at 104, which is on the lower McGregor, as I understand it, is a 450 feet dam.

Dr. PRITCHARD: Yes.

Mr. HOWARD: I understood the minister to say that the higher the dam the greater the problem, all other things being considered too. Would it be the intention or the thought to establish fish passages of some nature for this particular dam, to the lower McGregor?

Dr. PRITCHARD: I do not think that at the moment we can say whether it would be absolutely essential to have fish passages through that dam on the basis of the spawning area; but I can say this: that there are relatively few that go above it. If it were necessary, we would resort to something else, like fish lifts. But at the present time it is our opinion that it may not be necessary to establish these.

Mr. HOWARD: That would mean the abandonment of that area as a spawning ground.

Dr. PRITCHARD: For salmon.

Mr. HOWARD: Yes. I am thinking only of migratory fish.

Dr. PRITCHARD: Yes, with respect to migratory fish. But the Clearwater has never supported migratory fish in large runs in that area.

Mr. HOWARD: I am talking about the lower McGregor.

Dr. PRITCHARD: I was thinking of the other one, which is the Clearwater.

Mr. HOWARD: The lower McGregor dam is a 450 foot dam, as I understand it. You will find that on page 107.

Dr. PRITCHARD: Yes, I have it here. Major dam sites: lower McGregor dam site, 104.

Mr. HOWARD: Yes. On page 104, I read as follows:

The downstream one, known as lower McGregor site, lies at the head of the lower canyon some 16 miles above the junction of the McGregor river with the Fraser river and $1\frac{1}{2}$ miles above Woodall creek. For the narrow valley with its steep, heavily wooded slopes, a rock filled dam some 450 feet in height is judged most suitable.

Dr. PRITCHARD: The same argument holds there. This is pretty well up the McGregor, and most of the fish spawn below that.

Mr. HOWARD: Insofar as the McGregor is concerned, the area above that as a spawning ground is inconsequential.

Dr. PRITCHARD: May I answer your question this way: we, in the Department of Fisheries, do not consider that the loss of any spawning ground is inconsequential. We think that in the light of the economics of development and the effect it may have elsewhere that we should take a look at it and see if we cannot get fish up there or take a chance on a few eggs being destroyed.

Mr. HOWARD: In the discussion we had before you were talking about the Clearwater.

Dr. PRITCHARD: The Clearwater situation is just the same there.

Mr. BROWNE (*Vancouver-Kingsway*): I think it might be helpful to the committee if the minister could outline the exact responsibility of the two

governments involved in this matter. I think it can be agreed that the conclusion of this work and the development on the Fraser would be very harmful to the fisheries. I would like to know if an application to build a dam would be a provincial government or a federal government matter.

Mr. MACLEAN: Both governments would be involved. It is actually and primarily a provincial government responsibility. But under the Fisheries Act it is the responsibility of the minister, and the governor in council to safeguard the fish resources both with regard to natural and artificial obstructions in the rivers. We can insist, and we do insist, that proposed power sites which would be damaging to the fisheries resources will not be built, or in other cases where they can be built with feasible fish passing facilities that they have to do this; they have to be included.

Mr. BROWNE (*Vancouver-Kingsway*): Does the federal government have any responsibility in the field of flood control along those rivers? The Minister of Agriculture announced in the house the other day in his talk that they had, in Nova Scotia, some kind of regulations which were partly the responsibility of the federal government.

Mr. MACLEAN: It comes under a special act of the federal parliament. There are two chief acts. This is out of my field entirely, and it is the responsibility of another department. One is the Maritime Marshland Rehabilitation Act, and the other is the Prairie Farm Rehabilitation Act, under which the federal government does contribute to drainage in one case, and to bring about water control in the other. But water resources are primarily the responsibility of the provincial governments.

Mr. CROUSE: I was very pleased with the information given by the minister with respect to this problem. It certainly has thrown a great deal of light on it for me. It would appear that if power development was proceeded with on this river, it would mean the ultimate destruction of the salmon industry, according to the figures which the minister gave.

One question which comes to my mind is this: how desperate is the need for such power development? Is there an immediate need to develop it, and what forces are asking that it be developed at the present time?

Mr. MACLEAN: This again is a little out of my field. But I might say that the demand for power in British Columbia has been going up at a considerable rate in the last few years. There is an annual increase of about seven per cent. That is considered high, and in British Columbia, over the last few years, the annual increment in demand has been something in the order of 18 per cent in some cases.

This of course has created a tremendous urge for new major power developments. Now, there are several alternatives other than the Fraser. One, of course, is on the Columbia river system. The other is the Peace river in the north, the so-called Wenner Gren plan.

In addition to this, recently the British Columbia Electric Company began to build a large thermal plant in the Vancouver area which will remove some of the immediate pressure for added output from hydro sources. This plant is designed in such a way that it would be adaptable. I think I am correct in saying it is designed so that it might be adapted to the generation of electric power from atomic energy at some time in the future, if it becomes economically feasible.

Mr. DRYSDALE: This perhaps is the basic source of my concern. Under the terms of reference, section 8, there was to be a preliminary report, and then within three months they had to decide whether or not they were going to produce a final report. Is the final report going to be produced?

Mr. MACLEAN: I am afraid it is not my responsibility to answer that, in the first place. Even if it were, I would still not be in a position to do so as yet.

But the question of the reappointment of the board is now under consideration, I understand, by the two governments. It has not been reappointed yet, but it is under consideration, and no doubt there will be an announcement with regard to it in the very near future.

Mr. DRYSDALE: I found the report very interesting. But basically, if you boil it down, it comes to this: that we are still in the position that you cannot get the fish up and downstream if there is a dam in the way; and the recommendation has accelerated research to overcome this problem. From what I can see, there is no further work being done, and that the fisheries people are basically fighting the proposed power and flood control which is being indicated, and that it reflects a great deal of moving down towards the main river.

What is the value of this report?

Mr. MACLEAN: I think there is one consideration which is very important and which is being missed here. Although it is not the responsibility of this department, or even of the federal government, one of the most urgent—perhaps the most urgent aspect of all, as far as the Fraser is concerned, is flood control.

Mr. DRYSDALE: I realize that.

Mr. MACLEAN: This system, with some slight modification of proposal A, will meet that problem up to a height of almost 600,000 c.f.s., which is the highest flood condition which would be expected. It was the level reached in 1894. That is a major thing. Until that is met, there will be tremendous pressure brought about to do something. The simplest thing would be to build huge dams and to neglect the fisheries question altogether, as far as flood control is concerned.

So the important thing is to settle this urgent problem of flood control and thus provide a solution which would not be detrimental to the passage of fish, which is very relevant. It is not hoping, but we certainly at least have overcome one very important hurdle.

Mr. DRYSDALE: The thing which bothers me is that basically this report has been primarily interested in flood control and hydro electric development, with the fisheries interests being a very minor consideration.

Mr. MACLEAN: I would not say that at all.

Mr. CROUSE: Do you say "minor", with the millions involved?

Mr. DRYSDALE: Perhaps I am overemphasizing the point. The fisheries interest relatively, is secondary, and a minor interest. In other words, what effect can your department have in the way of recommending alternative sites for flood control dams? I mean, what would be practicable?

Mr. MACLEAN: One of the members of the board is our area director of fisheries in British Columbia, and it is a fact that the board has recommended, that no project—out of a whole series of suggested projects—should be pursued which would be detrimental to the passage of fish.

Mr. DRYSDALE: The point which I am perhaps labouring, and which worries me is that the problem—and you have perhaps answered it largely—is that we do not know if we are going to proceed to a final report. In the meantime, the situation is relatively urgent as far as flood control is concerned; and the thing which worries me is that if a small surge of development is not proceeding now, they are going to say in British Columbia that we need flood control, we have to put in these dykes or flood dams, and "to heck" with the fish.

Biologists have indicated that any change proposed in the oxygen value in the streams would have an extremely serious effect on the salmon. I suggest that opinions like that might possibly produce an imbalance.

Mr. MACLEAN: System A as has been agreed so far as the water and flood control works board is concerned, would have no appreciable detrimental

effect on the fish run, and system A, at the same time, provides means whereby the flood waters of the Fraser can be controlled. I might say as well that the research that is being done, as far as the problem of fish passage by power and other dams is concerned. It will go on independently of what the report of the board is, or what the board recommends, or whether the board is in existence or not.

Mr. DRYSDALE: There is an expenditure on that research. Approximately how many people are devoted to it, and how much money is being put into it?

Mr. MACLEAN: I must leave that question to Dr. Pritchard.

Dr. PRITCHARD: We now have on the Pacific coast eleven biologists, ten engineers and twenty seven technicians doing nothing else but trying to solve the problems involved with the impact of industry on the fisheries. Ninety per cent of those people are spending their time trying to draw up measures to overcome the effects of power development. This is just one aspect. The fisheries research board of Canada is also carrying on certain research now on the physiological phase, considering the behaviour and capacity of the fish to swim against and withstand the currents. This is basic information which we must have. In addition to that we are closely bound to all the scientists in the United States in the Pacific northwest states, and the experiments are arranged in such a way that there is no real duplication, because we all regard this as an urgent situation.

Now, in toto; there is something in the neighbourhood of 75 scientists and engineers working on this power problem, and they are spending approximately \$3 million a year on research on this problem alone. That is regardless of anything that happened here. We consider this as an ad hoc problem. It is a serious one and we have to get at it, but nevertheless, the research still has to go on. In that connection I might point out that we had some mention in this committee, Mr. Chairman, of Robertson creek—that is on the west coast of Vancouver island—where there is now being built a second spawning channel to test the effects of creating artificial spawning grounds, and a test flume for Dr. Brett's physiological work.

We have as yet no final solutions, but to date we are getting good information which we think, and we certainly hope, will enable us to look askance at a dam over 100 feet and say, "Well, we can overcome that." This is going on all the time, because these dams are coming, not only in the Fraser, but elsewhere.

With regard to the Fraser river basin board, I think the major fact is the one which our minister stressed, Mr. Chairman. It has had this effect, that the fisheries scientists have convinced the members of the Fraser river basin board that what we have been saying all along is absolutely true; in spite of press dispatches to the contrary and glowing reports of discovery, at the present moment there is no sound way of getting fish over high dams, either up or down, without serious loss.

Mr. DRYSDALE: The point that worries me is that in the report itself, on page 132, it says:

It will very likely take many years to find an acceptable solution to the problem of transporting anadromous fish over several barriers in one stream, so that complete freedom to develop the Fraser river and its tributaries for flood control and power production seems to be some distance in the future while the need for flood control is urgent.

Then in the recommendations, No. 7 recommends:

That programs of fisheries research regarding the effects of dams and flow regulation on fish maintenance, and the possibilities and relative efficiency of various means of artificial propagation be accelerated.

The thing that worries me on the over-all picture is that, in effect, we are racing against time, on the desire by power interests—which in the matter of the next few years are bound to prevail—purely on the basis of economics and the development of the lower mainland. Is there any prediction as to when there is any likelihood of a solution to this problem? Will it be 10, 15 or 20 years; or is anything being done to consolidate this program on the lines suggested in the recommendation?

Dr. PRITCHARD: Mr. Chairman, perhaps I might answer that. Anybody who predicted when he would get the final solution to all the problems which dams might raise for fish would be a very unwise man. I must make that clear. Predictions have been made, and such predictions we have had to controvert, because what looked good suddenly did not turn out to be good. We do not know when we will solve all the problems. But I think you should perhaps look at it this way. We know enough now, and in the last few years have obtained enough information, to be able to convince a board such as this that they should look at other alternatives. You say there is some urgency. There certainly is. But the solution for flood control is here. That urgency should not exist. They can have flood control and they can have fish. We are aware of the fact that the power interests want the Fraser river. This is quite normal, because there are five million horsepower there waiting to be developed.

We are also aware of the fact that if these other suggestions come into production, the demand for power will not be heavy again until 1980. So that in fact, from this report, the urgency for an immediate solution of the fisheries' problems has lessened. But we do not consider it has lessened.

That is why we are pushing this with every man we can get. I know that if you have an engineering layman, he would say that the way to do this is to hire 100 times as many men and work for half as long. But this cannot be with fish, where you have to check runs in cycles of two to four years. That is what takes the time. One run will come in and spawn, and you will not see that again until two to four years later. These are the problems you have to deal with. In other words, you have to deal with the biological medium, not the straight physical medium that engineers deal with.

Mr. CROUSE: You said it is possible to have flood control and the fish. Would you just elaborate on how you would get the fish up over the flood control dams and back again?

Dr. PRITCHARD: As the minister has pointed out, you could get flood control in either of two ways: one way is to build the dykes high enough so the water will not run over the low-lying land.

Mr. CROUSE: Is that your preferred way, sir?

Dr. PRITCHARD: No. May I just go on? The other way is to put storage in the upper river, or anywhere, and hold back, in this case, approximately 10 million acre feet of water and spill it when the river is low. If you do that, then your dykes do not have to be so high; is that not right?

Mr. CROUSE: Yes.

Dr. PRITCHARD: There is a difficulty in building dykes of tremendous heights, and it is almost an insuperable difficulty. If you build dykes, let us say, 48 feet high, and people are living in that little hollow and something happens to the dykes—as we understand it did in Holland, when the little boy put his finger in the hole—you have that constant threat. People do not like that. A much better way, and a better way for the economy, is to control some of that water. This system A gives you the control of 10 million acre feet of water and merely means that you have to bring your dykes up a little and repair, at a cost of, let us say, \$4½ million.

I am afraid, Mr. Chairman, that Mr. MacLean will tell me this is not my business, and it really is not; but I merely wanted to say that the solution to the dyking problem is here.

Mr. CROUSE: You still have not said how you get the fish up over this storage water.

Dr. PRITCHARD: In the case of system A, we feel that the dams will be low enough, where it is necessary to get them up. On the basis of present knowledge, we could get them through with fishways and also bring them down again.

Mr. MACLEAN (*Queens*): If I might add this, Mr. Chairman: a number of these dams are restricted to tributaries upstream, where there are no fish runs anyway. None of these dams in system A are on the main stem of the Fraser; they are on the tributaries of the Fraser.

Mr. NOBLE: Mr. Chairman, in view of the fact that it has been brought out here this morning that production of valuable sockeye will be curtailed in this flood control development in the Fraser river, I was wondering if Dr. Pritchard, or the person in charge in the department, has ever thought of bringing these fish to the Great Lakes? I am interested in the production of fish in the Great Lakes, and I have in mind the fact that sockeye have withstood the attack of lamprey from the ocean. We have trouble with sea lamprey killing our lake trout, and if we had the sockeye salmon in the Great Lakes we would beat this problem.

Dr. PRITCHARD: This happens to be a problem with which we are now confronted, the moving of Pacific salmon one area to another. I might say, Mr. Chairman, for Mr. Noble's benefit, that I am aware that I am about to "burst his bulble". The sockeye salmon are not as pure as you think they are. In certain areas in Alaska they do have triaenophorous, which is something you have to cope with. I would say, however, that it is highly unlikely they could be established in sufficient runs. There were at one time transplantations of spring salmon made to Lake Ontario, and I suppose I was one of the last people ever to see a spawning spring salmon run up the Port Credit river. But the run never established itself. I would say that there is very little chance of that.

Mr. NOBLE: What would be the possibility of developing a cross between the sockeye and the lake trout?

Dr. PRITCHARD: I think this is possible. But crosses between two types of fish that are in the lake, will probably have a much better effect. I am talking now of the cross called the "splake", which is a cross between the lake and the speckled trouts. It looks as if this might be very helpful to us, because it grows very quickly.

Mr. LEGERE: In view of what has just been said concerning the cost of this project, the building of the dam, and taking into consideration that if those dams went through we could be losing about \$4 million worth of fish a year—

Dr. PRITCHARD: It would be \$34 million.

Mr. LEGERE: That makes it that much more.

Mr. HOWARD: It makes it nine times worse.

Mr. LEGERE: In view of that, would it not be preferable if the power urgency could be solved in that district by thermo-power? It would kill two birds with one stone.

Mr. BROWNE (*Vancouver-Kingsway*): Mr. Chairman, there is one point in connection with the value of the fishery up the Fraser river. Perhaps some of the members might not have considered this. That \$34½ million is just the

landed value paid to the fishermen. The final value, after landing and processing, would be perhaps twice that.

Dr. PRITCHARD: It is about \$68 million.

Mr. CROUSE: Another fact comes to mind on this question which Mr. Legere asked. The other day I noticed that a uranium mine closed down because there is no sale for uranium. There is apparently a large quantity of uranium, and it will be available for power development. But there is not a supply of food in this country. We read every day that our population is increasing. Here we are dealing with a food source. It would appear to me to be more important to conserve the fisheries for the future population of this country and utilize the uranium for power development.

Mr. MACLEAN (*Queens*): This, Mr. Chairman and Mr. Crouse, has touched on a very important aspect of this that is sometimes overlooked. That is, that power development from hydro sources, or even from the common types of thermal development, may be a passing thing. It is quite likely that in the very near future it will be economically feasible to produce power from atomic energy. But the need of fish for food—fish which is a high protein type of food—will become greater and greater as the years go by.

If you were to wipe out a resource that regenerates itself indefinitely into eons of time for a temporary benefit, it would be very poor reasoning from the long term point of view. This is a powerful argument for taking every feasible step to safeguard the fish rivers, not only for the immediate requirements, but for the requirements of future generations as well.

Gentlemen, I am due at a cabinet meeting now. I am willing to stay here—this is my first responsibility—if anyone has questions that they think require my presence. On the other hand, if the remaining questions are of a technical nature they can be answered by Dr. Pritchard, and I would appreciate it if I could be excused.

Mr. HOWARD: Just before you go, sir, perhaps I could make this one suggestion. It might be—at least, I hope it is—connected with your coming cabinet meeting. I do not know whether this matter is on the agenda of this particular cabinet meeting, but certainly it would be appreciated by everyone, especially here, if you could arrange to speed up as much as you possibly can the consideration of the re-appointment of the Fraser river board.

Mr. MACLEAN (*Queens*): Yes. Although this is out of my realm—and my only reason for not answering more directly is that it is not my responsibility—you can rest assured that that will be done. That is under full consideration and will be done. The decision will be taken as expeditiously as possible.

Mr. HOWARD: The Minister for Northern Affairs and National Resources, on answering some questions of mine, said—or maybe I took this from his remarks—the board would be reconstituted and he would have an announcement to make shortly. But it is just a matter of speeding up as much as possible the reconstitution of the board.

Mr. MACLEAN (*Queens*): I would say this, arrangements have been made for the board to continue in the interim. It has not been disbanded, or anything of that sort.

Mr. HOWARD: I hope not.

Mr. MACLEAN (*Queens*): No. There is one thing I want to say before I leave, gentlemen, and it is this. I would like very much if you would all come over some day at noon—the date has yet to be firmly decided—to sample one of our test kitchen fish dinners.

Mr. HOWARD: Sockeye?

Mr. MACLEAN (*Queens*): We will have a wide variety of Canadian fish from all sources. You will get written invitations. I am not quite sure what the date will be, but it will be in about three weeks' time, something in that order. It will be some time in May.

Gentlemen, if I may be excused I will leave you now. I want to say that I appreciate very much the high level of inquiry that you have carried on here and the knowledge you have exhibited as far as fisheries problems across the country are concerned. As I said, in my opening remarks, I think it is obvious that every member of the committee is quite familiar and well versed in at least some phase of the Canadian fishing industry. I want to thank you for your interest in the subject.

The CHAIRMAN: Mr. Minister, I am sure that all the members will excuse you, and thank you for having been with us at all the meetings we have had.

Mr. MACLEAN (*Queens*): Thank you very much.

Mr. HOWARD: Mr. Chairman, there was a discussion earlier between Dr. Pritchard and me about the number of salmon which would migrate past some of the points listed for dams in system A. In looking further through the book I have found the table starting at page 161, and on page 162 it lists information in this regard. I think it might be well if we could put it on the record, and perhaps I could read it from here. We will see the species and the number of fish involved.

Perhaps it might be well, Mr. Chairman, to ask that at this point in the proceedings part of this table be printed, as it refers to those particular dam sites. I do not want the whole page included, but those particular dam sites such as the lower McGregor, Stuart lake, Clearwater on the Clearwater river, Hemp creek and Olsson creek. Then the information will be contained in the proceedings.

The CHAIRMAN: Yes; is it agreed? Agreed.

Site No.	Location	Species	Timing of Adult Migration	Timing of Downstream Migration	Estimated Maximum Daily Adult (Upstream) Migration
104	Lower McGregor..... (McGregor River)	Spring.....	Aug. 15-Spet. 30	Apr. 15-June 30	250
119	Stuart Lake..... (Stuart River)	Sockeye..... Spring..... Steelhead....	July 15-Sept. 15 Aug. 15-Sept. 30 Jan.-Dec.	Apr. 15-June 15 Apr. 15-June 30 Apr. 15-July 15	200,000
141	Clearwater..... (Clearwater River)	Spring..... Coho.....	Mar. 1-Oct. 30 Aug. 1-Nov. 30	Apr. 15-June 30 Apr. 15-June 30	1,200
194	Clearwater X..... (Clearwater River)	Same as 141..			1,200
142	Hemp Creek..... (Clearwater River)	Same as 141..			1,200
185	Olsson Creek..... (Fraser River)	Sockeye..... Spring.....	July 20-Spet. 9 Aug. 15-Sept. 30	Apr. 15-June 15 Apr. 15-June 30	5,000

Mr. HOWARD: I think we can probably assume that the pressure from the hydro electric interests for the development of the Fraser for power generation purposes is not so strong as it was maybe two or three years ago, especially in view of the discussions that are taking place in the International Joint Commission over the Columbia and the so-called Wenner Gren project in the Peace river. I was thinking that if we perhaps proceeded immediately

to develop these two sites—or one of them—it would develop enough energy to hold back the pressure from hydro electric interests for the development of the Fraser river. At least, I hope that is the case. It will certainly give our biologists and people in the fisheries department more time and more opportunity to conduct to the fullest extent possible their research into whether or not it is possible to have fish and power at the same place. It will also give more opportunity to develop means of getting migratory adults up, and the younger fish down, through the dam.

Reference is made in this report to dyking, and that the problem of flood control could be solved in this way, which I think is quite true. While it may be a bit afield from the actual consideration of fish, I think it is connected because of the fact that dams are an integral part of the flood control program under system A. I gather from reading through this report that the dykes in the lower Fraser valley can be brought up to the level they were during and following the 1948 flood at a cost of approximately \$17 million, plus annual maintenance costs of almost another \$2 million; in fact, \$1,915,000. Brought up to this level, the necessity for storage dams is lowered considerably, as I gather from reading the report. Maybe it is not eliminated entirely.

In addition to that there is the other question of the land value being protected in the valley, and so on. I do not think we should go into that. But the point is—while it may not be in regard to fisheries particularly, nevertheless it was considered by the Fraser river board and it does have a connection—that possibly efforts should be made towards the raising of the level of the dykes in the lower Fraser valley at least to the level that they were before the 1948 flood.

That would also relieve some of the pressure with regard to the necessity of establishing storage and/or power dams in the tributaries of the Fraser. The federal and the provincial governments in 1948 established the Fraser river dyking board to build those dykes, and I am sure the federal government will not be less generous than it was then, when they met 75 per cent of the cost of establishing those dams; and all of it was completed within a two year period, or slightly less than a two year period.

This should be given quite a bit of consideration on the part of the federal government, to participate financially with the province in raising the level of these dykes.

Then compare the \$17 million cost with a maximum estimated cost of, as I gather from here, \$220 million and a minimum of \$110 million for power and storage dams. There is that wide range of possible cost for the development or the building of storage and hydro dams in connection with flood control. I am not taking into account the time that would be necessary to build these particular dams. I think we should concentrate, or attempt to concentrate, whatever effort we can on the dyking question in regard to the immediate problem of flood control so that the effects of floods will be overcome in the lower Fraser valley and the fishing interests will not be affected quite so seriously.

Mr. DRYSDALE: Hear, hear.

Mr. HOWARD: The necessity to reconstitute this board along the lines as recommended is overpowering and should be done without any delay. I am quite sure, as the minister has indicated, that it is the intention that the Fraser river board should be reestablished. I hope it takes place immediately and that the matters referred to it substantially follow the recommendations of the board as contained on page 168, and follow along that additional work. Beyond that, I doubt if there is much else involved, unless something else arises.

Mr. BROWNE (*Vancouver-Kingsway*): In connection with the dykes, Mr. Chairman, I would ask this question. We have had quite a number of figures

flying around here. At one point the minister mentioned the figure of \$4½ million, I am not just sure what the figure is. At various points in this report it says \$17 million, and at page 55 it says \$37 million. I hope, as I go through the book, it is not going to keep going up. Is there any explanation, Dr. Pritchard, of the various figures that are here?

Dr. PRITCHARD: There is an explanation, Mr. Chairman, and I might say that Mr. Howard has almost covered that explanation. It depends on what you are going to do with the dykes. We will start at the smallest one. If you put in scheme A and retain approximately 10 million acre feet of water, you can repair the dykes to the necessary standard to contain this 600,000 cubic feet per second with \$4½ million.

Mr. BROWNE (*Vancouver-Kingsway*): Then the figure we are interested in, for flood control, is \$4½ million?

Dr. PRITCHARD: But the point is, Mr. Chairman, that if you do that, then you have to spend the other money for the dams under scheme A. If you bring your dykes up to the standards set by the Fraser river dyking board—this is something that Mr. Howard did not mention—it will cost you \$17 million. Just strengthening and repairing to the present standard is one thing. On the other hand, if you rely on dykes alone, and no storage, that is going to cost you \$37 million. This is different. It just depends on what you are going to do.

Mr. BROWNE (*Vancouver-Kingsway*): In order to get adequate flood control by dykes and nothing else, it would take \$37 million.

Dr. PRITCHARD: That is what I figure, but this is not my field. I do not feel I should comment further. I was just trying to explain the difference in these figures. They are not wrong. It just depends on which alternative you take.

Mr. BROWNE (*Vancouver-Kingsway*): That is what I was trying to get across. By using just flood control strictly by means of dykes, your cost of construction and of a storage reservoir system which, I understand, in one case is for dykes—it would cost a total of—that storage reservoir would make it a \$220 million maximum cost.

Dr. PRITCHARD: As I remember the report of the flood control recommendation, it is that the dykes should be brought up to the standards recommended. In any event, the dykes should have \$17 million spent on them. Please do not ask me any more about that, but that is the recommendation.

Mr. HOWARD: May I make one comment about the \$37 million figure. I do not know if that is considered to be the total cost of the dykes or not, but on page 55, about half way down in the third paragraph, it says:

The capital value of the existing dykes has been computed on the basis of these costs, and for the 223 miles of dykes the value is estimated to be \$37 million.

I wonder if that takes into account the work that was done in building the dyke in 1948? Is that considered to be the total cost of bringing the dykes up to the standard as set?

(1) Dykes alone to withstand levels corresponding to design flood maximum discharge of 576,000 cfs at Hope.

This leaves approximately \$17 million.

Dr. PRITCHARD: That is right.

Mr. HOWARD: It shows \$54 million as being the capital value of the dykes at the present time, plus \$17 million estimated expenditure. I looked it up. Is \$17 million the estimated cost of bringing these dykes up?

Mr. DRYSDALE: I wonder if you could tell me, pursuant to this preliminary report, what, if anything, has been done to implement any of the suggestions

or recommendations made in it, or with respect to any dykes or dams? Has anything been started, or is anything projected in the immediate future?

Dr. PRITCHARD: I am in the same position as the minister in answering your question. The first thing that has to be done is that the board be continued. You have your answer to that question. And as far as I am aware, nothing else could be done until the board was in there. I do not know if you want to know exactly what has been done with regard to the dyking. I am afraid that is not our responsibility. The Minister of Northern Affairs is the man who has the responsibility.

Mr. DRYSDALE: My second question is this: we were discussing the amount of staff and the relative progress they were making. I wondered if you could tell us what you would consider to be the optimum staff, and if you had them available, what amount of money would be required to accelerate the development—I mean, within reasonable limitations. You could say an unlimited number of staff and an unlimited amount of money. But you yourself suggested that there was possibly an optimum range.

Dr. PRITCHARD: Mr. Chairman, I will answer this question on a purely personal note, which may not actually suit Mr. Drysdale. I am not convinced that the efficiency or productivity of any staff can be measured in numbers or in money. I feel that with the probable exception of one or two selected categories, we now have available the staff necessary really to go at these problems. I shall add, that in addition to that, so long as the government continues to give favourable consideration when we feel the need of more staff and more money, I cannot see that this is a trouble at all.

Frankly, I think that there are enough men on the Pacific coast in our staff and in other staffs working on this to produce results, and that the problem is mainly to make sure that they are working efficiently on pertinent problems, and not duplicating each others efforts.

Mr. DRYSDALE: You do not have a manpower shortage as to the actual type of manual checking on the runs and that sort of thing?

Dr. PRITCHARD: No.

Mr. McLENNAN: It seems to me that the power interests are using the question of flood control to put over the need for power, and they are placing their main interest in power rather than on the protection of fish and flood control. I can see a great deal of the problem there, in the fact that they will control that water for their use and disregard fish spawning and the effect it will have on the lower Fraser valley as far as shipping is concerned. They could lower the water at the dams by storage there, and at the Fraser river mouth the level would drop down and thus affect our shipping.

As a resident of the lower Fraser valley, and as one who went through the 1948 flood, I realize the seriousness of that problem. I have never objected to dams being built for flood control only, but once you get the big power interests in there, I am afraid they will use the storage to their own advantage, regardless of other conditions as far as fish and shipping are concerned.

Dr. PRITCHARD: I cannot speak of the psychology of the power people. I can only say that there is, in the act under which the Department of Transport operates, and under which we operate, provision to make them accept certain conditions; and one of those, in the case of fisheries, is the regulation of the flow that they give us below the dams.

Mr. McLENNAN: What effect would that have on the lower Fraser insofar as the fish and shipping are concerned?

Dr. PRITCHARD: I cannot say what effect the operation of the dam would have. If they operate without harming the fisheries, there would be no need

to oppose them. And as far as transport is concerned, I assume that there would be sufficient water released to take care of the shipping. But I cannot speak for that.

Mr. MCPHILLIPS: Following along what Mr. McLennan said, I think there was some impression given earlier this morning about the control of the Fraser river. It is true that the water resources come under the authorities of British Columbia but the Fraser was a navigable river at the time of confederation, so no obstruction can be placed in that river without the approval of the federal government. I think that point sometimes is overlooked. So there is no question of any power company damming and taking the water any way they can as they might in some other streams.

I agree with Mr. McLennan that there is a big demand for power in the southwestern corner of the mainland. They do not want to go away up north. They would like to have a dam south of Moran. North of Moran does not interest them, because there are no power developments to take care of them there. So there is no immediate problem. The president of the British Columbia Electric Company in his annual report admitted there would not be a power squeeze until about 1980. I think that factor is important for us to remember; that the Fraser river, being a navigable river, the federal government can control any obstruction placed in that river whatsoever.

Dr. PRITCHARD: I have no comment to make.

Items 131 and 132 agreed to.

The CHAIRMAN: We have concluded our study of the estimates which were referred to us by the house. Shall I report them back to the house.

Agreed.

Mr. HOWARD: I wonder, on account of the Fraser river board, whether the committee should not ask the steering committee to draft some sort of report and include recommendations if they so desire with respect to the Fraser river board? I am merely expressing the idea that we would like to see the reconstitution of that board immediately or as soon as possible.

The CHAIRMAN: Yes.

Mr. HOWARD: Would that require any formal motion?

The CHAIRMAN: I do not think so.

Mr. HOWARD: Perhaps the steering committee would meet to consider it.

The CHAIRMAN: I shall see about that.

I wish to thank the hon. Minister of Fisheries, the deputy minister, Dr. Pritchard, and the other officers of the department who were kind enough to answer the very interesting questions which were put to them by members of the committee.

I also wish to thank the members of the committee for their cooperation. Thank you all again. The meeting is adjourned to the call of the Chair.

I N D E X

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