

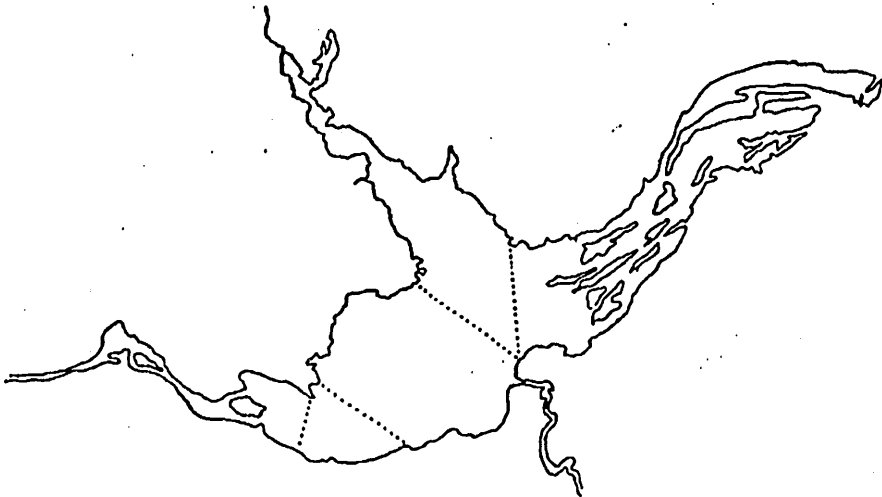
LEGISLATIVE ASSEMBLY OF THE  
NORTHWEST TERRITORIES  
8<sup>TH</sup> COUNCIL, 56<sup>TH</sup> SESSION

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TASK FORCE  
ON  
GREAT SLAVE LAKE FISHERIES



GOVERNMENT OF THE NORTHWEST TERRITORIES  
DEPARTMENT OF ECONOMIC DEVELOPMENT

JUNE 12, 1975

## M E M B E R S

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Department of Economic Development,  
Government of the N.W.T.,  
Yellowknife, N.W.T.
- S.C. Kirwan, Secretary - Supervisor, Fishery Development,  
Fish and Wildlife Service,  
Department of Natural and  
Cultural Affairs,  
Government of the N.W.T.,  
Yellowknife, N.W.T.
- Frank Hirst - President,  
N.W.T. Fishermen's Federation;  
Member, Board of Directors,  
Freshwater Fish Marketing Corporation,  
Hay River, N.W.T.
- Percy Monkman - Secretary/Treasurer,  
N.W.T. Fishermen's Federation;  
Member, Advisory Board to the  
Freshwater Fish Marketing Corporation,  
Hay River, N.W.T.
- Gerald Glazier - District Manager,  
Fisheries and Marine Service,  
Environment Canada,  
Yellowknife, N.W.T.
- Peter Moss - President,  
Freshwater Fish Marketing Corporation,  
Winnipeg, Manitoba.



GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

Yellowknife, N.W.T.  
XOE 1HO

3 June 1975.

Commissioner of the  
Northwest Territories.

Dear Sir:

The following is the report of the Task Force established by you, with myself as Chairman, to investigate the causes of problems that plague the fishermen of the Great Slave Lake.

Members of the Task Force were:

- Mr. Frank Hirst - President, N.W.T. Fisherman's Federation; Member, Board of Directors, F.F.M.C.  
Hay River
- Mr. Percy Monkman - Secretary/Treasurer, N.W.T. Fisherman's Federation; Member, Advisory Board to the F.F.M.C.  
Hay River
- Mr. G. Glazier - District Manager, Fisheries and Marine Service, Environment Canada  
Yellowknife
- Mr. Peter Moss - President, Freshwater Fish Marketing Corporation, Winnipeg
- Mr. S. Kirwan - Supervisor, Fishery Development Section, Fish and Wildlife Service, Government of the N.W.T.  
Secretary to the Task Force

I would like to express my appreciation and thanks to those members who put in a great deal of time and effort on what was a very complex matter. They have been very objective in their approach to the problems and, as a result, the recommendations that are being made. I would also like to express my thanks to D. Patriquin, Chief of Research and Evaluation, Department of Economic Development; B. Wong, Fishery Development Officer, Fish and Wildlife Service; Tom Dunn, Comptroller, F.F.M.C.; and Bill Potvin, Area Manager Hay River, F.F.M.C. These people assisted us greatly in the compilation of this report.

I would be remiss if I did not point out the following:

1. There would appear to be a feeling prevalent amongst certain elements of the fishermen and the public that the F.F.M.C. is not giving the fishermen a fair price and that the fishermen would be better off if they were not part of the F.F.M.C. There is no evidence to support this. It is true that the F.F.M.C. was plagued initially with incompetent management which paid unrealistic prices to the fishermen and operated inefficiently which resulted in large losses, none of which were borne by the fishermen. This situation has now been remedied. However, the Corporation is now faced with a world-wide depressed fish industry. Prices have hit rock bottom and the U.S.A., which is the major market for Canadian fish, is showing a 20% drop in consumption. The Corporation has done an effective job in just being able to maintain prices, and in some instances raise them slightly, and show a small profit. It should also be remembered that the F.F.M.C. is, in effect, the property of the fishermen and that by legislation must purchase all fish caught by the fishermen, unlike a private company which can stop buying if its inventory is large. The F.F.M.C. could though do a far better public relations job, particularly in its relations with the fishermen.

2. This whole matter of the Great Slave Lake fishery and the problems facing it is a very complex one. The Task Force has endeavoured to make recommendations which will alleviate but not necessarily eliminate these problems. We feel that the fishery is viable but if the world markets do not improve and costs to the fishermen continue to rise, plus the added competition for labour if the pipeline is built, makes this statement questionable. Subsidies generally indicate a non-competitive or non-viable industry but they can be used to help carry the industry over this rough period. They should be of a temporary or self-liquidating nature only. At some point in time, if the need continues, a good, hard look may have to be taken at this whole industry and whether it should be continued.

Finally, I would like to apologize for the delay in presenting this report, but the subject was a very complex one and for it to be handled properly, we required the extra time. I would also like to single out for special praise the Fishery Development Section, Fish and Wildlife Service, Government of the N.W.T., who carried out the physical work in writing up this report.

Yours very truly,



J. A. Bergasse,  
Chairman,  
Great Slave Lake  
Fishery Task Force.

## GREAT SLAVE LAKE FISHERY TASK FORCE REPORT

### INTRODUCTION

The Great Slave Lake Fishery Task Force was established by the Government of the Northwest Territories in order to investigate, in conjunction with the Freshwater Fish Marketing Corporation, Fisheries and Marine Service, and the Northwest Territories Fisherman's Federation, the causes for problems that plague the fishermen. The first meeting was convened by J. A. Bergasse on 7 January 1975, at Hay River.

### TERMS OF REFERENCE

In keeping with the initial responsibility of the Task Force, the following terms of reference were developed:

"The Task Force will examine all aspects of production and processing of Great Slave Lake fish in relation to returns to the fishermen.

"The Task Force will make recommendations to the Commissioner of the N.W.T. of measures for improving the livelihood of the fishermen from their trade.

"The Task Force will communicate its findings to the head of each participating agency."

### CONCERNS

Commercial fishermen on the Great Slave Lake are faced with escalating operating costs and low returns from products that must compete with alternative and usually cheaper sources. Because of a lack of control over prices received from their products, the fishermen find themselves in a tenuous position.

The Task Force has addressed itself to those factors which might be responsible for the plight of the fishermen and over which the fishermen could have some control, namely the volume and the cost of production.

## SUMMARY AND RECOMMENDATIONS

### I. Production

The opinion was expressed within the Task Force that some of the causes for the decline in the production of the Great Slave Lake were:

1. Decreasing number of fishermen and/or a decrease in total effort because of a lack of incentives brought on by low prices and the availability of more lucrative alternative employment or welfare or Unemployment Insurance benefits.
2. Fishing efficiency.
3. Status and potential of the resource.
4. Reduction of fishing area.

#### 1. Decreasing Number of Fishermen and Fishing Effort

The estimated number of net sets that were made during the 1972 and 1973 summer fishery were 69,000 and 74,000 respectively.<sup>1</sup> The degree of total effort expended during these two summers was considerably greater than that of the years prior to 1954 but less than that of any year between 1954 and 1964.<sup>2</sup>

The reasons for the decline in effort and the reduction in the number of fishermen were identified as:

- (a) price to fishermen has not kept pace with the inflated cost of production;
- (b) the easy availability of UIC benefits during the fishing seasons and not during the off-seasons.

### RECOMMENDATIONS

- (1) The Government of the Northwest Territories investigate the possibility of increasing the return to fishermen through subsidies, guaranteed annual income or higher prices.
- (2) The Government of the Northwest Territories negotiate with the Unemployment Insurance Commission for a change in policy regarding UIC payments to fishermen.



## 2. Fishing Efficiency

The gill net appears to be the most effective gear for harvesting low-volume, high-priced fish such as whitefish and trout. There is little room for improving the efficiency of the gill net except by reducing the allowable mesh size which, however, would effectively reduce the average size of fish landed and the price per pound to the fisherman.

The Task Force concerned itself with the recent litigation over the use of undersized nets and the continuing controversy between the fishermen and Fisheries and Marine Service over the standards for measuring nets.

### RECOMMENDATION

- (3) Fisheries and Marine Service introduce a gill net mesh measuring device that is not subject to personal bias and is acceptable to them and the fishermen.

The types of boats that are used in the Great Slave Lake fishery are the one-man skiffs and the larger lake boats that are equipped with mechanical net lifters and require four men for operating.

In the summer of 1973, 18 boats and 56 skiffs, employing a total of 2,280 nets, harvested 1.85 m. pounds of commercially valuable fish. The average numbers of nets on skiffs and boats were 15 and 80 respectively, and the total estimated number of net sets was 74,457 for an average of 32.7 sets per net during the 3-1/2 summer months. -- What are the causes for this low level of effort? --

According to the fishermen (personal interviews) the underutilization of gear is the direct result of low net returns brought about by high operating costs and prices that are not consistent with inflation. As a consequence, they are unable to offer wages that would attract reliable and experienced help. Frequent disruptions in fishing also occur because of a lack of funds for servicing and maintaining equipment and purchasing parts.

### RECOMMENDATION

- (4) The Freshwater Fish Marketing Corporation assess the requirements of the fishermen and maintain an adequate inventory of spare parts.

The following table compares the operating efficiencies of the skiff, the lake boat and a light two-man steel skiff with mechanical net lifter that has been used successfully in Manitoba and on Lake Athabasca.

TABLE I

Particulars	Lake Boat	Skiff	New Steel Skiff
Size and Material	45'-48' steel	20'-30' wood	30' steel
No. of people employed	4	1	2
No. of nets	80 (60-100)	15 (10-40)	60 (40-80)
Net lifting	mechanical	manual	mechanical
Carrying capacity	6 tons	1.5 tons	3 tons
Estimated annual amortization and operating cost	\$18,200	\$5,740	\$10,050
Average price/lb. paid to fishermen	\$ 0.264	\$ 0.243	\$ 0.255
Minimum landing for break-even	69,000 lb.	23,600 lb.	39,400 lb.
* Maximum theoretical landing 60 sets/net/season	123,360 lb.	23,130 lb.	90,000 lb.
Maximum theoretical net profit (25¢/lb.)	\$14,300	(\$114.21)	\$12,900
Maximum theoretical return per \$1.00 invested	\$ 0.79	(\$ 0.02)	\$1.28

\* Based on 60 sets/net/season and a catch per unit effort of 25.7<sup>1</sup>

RECOMMENDATIONS

The Task Force endorsed recommendations (b) and (c) of the Great Slave Lake Gear Development Study -1972,<sup>3</sup> namely:

- (5) "(b) introduction of a light steel skiff with mechanical gill net haulers."
- (6) "(c) introduction of a basic fisheries industrial training program designed for the primary and secondary producer of the N.W.T."

### 3: Resource Potential

#### (a) Commercially Valuable Fish

Based on existing quotas and an estimate of rough fish potential, the annual sustainable yield of the Great Slave Lake approximates 9.0 m. pounds. Fisheries and Marine Service has established 4.75 m. pounds as the maximum sustainable yield for the commercially valuable species; however, this estimate is currently under review and could be subject to a downward revision.

The catch per unit effort for whitefish has shown little change since 1957.<sup>1</sup> Therefore, one may conclude that commercial harvesting has been taking place approximately at the biological level of production of the lake.

At the current level of harvesting and pricing schedule, the landed value to the primary producer approximates \$675,000 (2.7 m. x \$0.25). This level of exploitation can support only 130 operators at the acceptable minimum Canadian annual income of \$5,200 or 56 operators at the average Canadian annual income of \$12,000. The number of fishermen on the lake in 1973 was 128.

#### RECOMMENDATION

- (7) Fisheries and Marine Service and the Government of the Northwest Territories conduct an economic evaluation of the Great Slave Lake fishery in order to determine the optimum number of fishermen that the industry can support.

The frequently expressed opinion that the total production of the fishery could be increased by recruiting new fishermen would be defeating as this practice would only serve to further depress the returns to the individual fisherman. Training and more efficient gear would aid in increasing the production and the income of the fishermen.

#### (b) Rough Fish

Fifty-three per cent of the total landing from the lake comprised rough fish which represents a substantial waste of effort and energy and loss of income to the fishermen.

RECOMMENDATION

- (8) Subject to improvement to the world fish marketing situation and a continuation of the subsidy on mullets, the Freshwater Fish Marketing Corporation should investigate the potential for utilizing mullets and possibly other rought fish from the Great Slave Lake.

4. Reduction of Fishing Area

The Task Force examined the feasibility of increasing the total landings of fishermen by harvesting inland lakes within an economical radius of Hay River and reopening areas currently closed to commercial fishing.

The prospect of increasing the total production of the fishery by harvesting inland lakes within a 100 mile radius of Hay River was examined and found to be uneconomical.

The reopening of the East Arm (Area VI) of the Great Slave Lake to commercial fishing was opposed by Fisheries and Marine Service for the following reasons:

- (i) The East Arm is biologically the least productive area of the lake; however, because of its depth and water temperature it is suitable for lake trout production.
- (ii) Lake trout are highly susceptible to gill netting, therefore, any benefit which will be derived from their exploitation will be of a short-term nature.
- (iii) Fishing the East Arm is uneconomical because of the high transportation costs involved.
- (iv) The total area of the East Arm that is conducive to commercial fishing offers little potential for a long-term, viable fishery.

The fishermen advanced the following arguments against the closing of the East Arm:

- (i) The East Arm has always been the major trout producing area of the lake.
- (ii) It has been a major winter fishing area. In 1973, 62% of the total catch from the East Arm was taken during the winter when its total production exceeded the combined totals of Areas II, V, IV and 1E.

(iii) The East Arm has historically provided protection from fall storms and winter winds.

In 1973, the ratio of whitefish to trout harvested in Area VI was 1.39 which approaches closely the 1.41 value for the whole lake from 1945 to 1951.<sup>1</sup> Looking at the other areas of the lake, the ratio increased to 25.3 during the same period. -- Is the trout population in the East Arm in any danger? --

The summer closure of Area 1W was queried by the Task Force, and it was resolved that inasmuch as this is an important spring and fall staging area for migratory birds, there is no justification for its closure throughout the summer.

#### RECOMMENDATIONS

- (9) Fisheries and Marine Service consider changing the management of areas presently closed to commercial fishing to allow for limited commercial exploitation at specific times of the year.
- (10) Fisheries and Marine Service consider revamping the management of the Great Slave Lake to allow for maximum harvesting within quota limits.
- (11) Fisheries and Marine Service consider delegating more management decision making responsibilities to the local District Office.

## II. Production Costs

### 1. Fishermen's Costs

The Task Force examined the start-up and operating costs to fishermen and the extent of their capitalization.

TABLE II

	Lake Boat	Wooden Skiff	Steel Skiff
<u>Capital Outlay</u>			
New	(40,000)	2,500	20,000
Used	20,000	--	--
Nets and other equipment	9,000	3,500	6,500
TOTAL	29,000	6,000	26,500

TABLE II (cont'd)

	Lake Boat	Wooden Skiff	Steel Skiff
<u>Annual Amortization</u>			
Used Boat - over 10 year period	2,000		
Wood Skiff - over 5 year period		500	
Steel Skiff - over 20 year period			1,000
Nets and equipment - over 5 year period	2,000	700	1,300
<b>TOTAL</b>	<b>4,000</b>	<b>1,200</b>	<b>2,300</b>
<u>Operating Costs</u>			
Boat and motor	1,000	500	1,000
Fuel and oil	1,000	1,000	1,000
Wages	9,000	2,250	4,500
Groceries and sundries	3,200	800	1,600
<b>TOTAL</b>	<b>14,200</b>	<b>4,550</b>	<b>8,100</b>
Total operating and amortization costs	18,200	5,750	10,400
Poundages required to break even	69,000	23,600	34,900
Average landing (1974) for each type of boat	53,400*	10,100*	100,000**

\* Data provided by F.F.M.C. - Hay River

\*\* Averaged from the operation of 6 boats on Lake Athabasca

A review of the individual fisherman's landings for the summer of 1974 reveals that only 12% of the skiffs operators and 22% of the boat operators exceeded the poundages calculated necessary to exceed the break-even point.

Inasmuch as skiffs are known to be less productive than boats, the trend on the lake has been an increase in their numbers. The high initial cost of boats appears to be the prohibiting factor. Costs will continue to rise and today's marginal operators will be forced to abandon fishing unless their efficiencies can be improved and assistance provided for acquiring and upgrading boats.

For lack of information, the winter fishery was not subjected to similar cost analysis. It is, however, the general consensus that winter fishery is more costly and less productive than summer fishery.

#### RECOMMENDATIONS

- (12) Fisheries and Marine Service consider revising the boat building subsidy program to include smaller boats.
- (13) Fisheries and Marine Service, or any other Federal agency, e.g. DREE, consider introducing a program to provide assistance to fishermen for the purchasing and upgrading of used boats.
- (14) The Government of the Northwest Territories investigate the feasibility of introducing a long-term, low-interest loan program.

#### 2. Other Costs to Fishermen

Since processing and freight costs are borne by the fishermen, these activities were studied by the Task Force.

It was expressed by the Task Force that the plant and packer boat are overcapitalized in relation to the potential of the lake.

##### (a) Plant Costs

The feasibility of introducing an alternative smaller processing plant that would effect a saving to the fishermen through lower, fixed overhead costs was examined. However, based on the depreciation cost of the existing facilities and the high cost of a suitable replacement at today's labour and material costs, this course of action was not feasible.

The existing processing facilities are 25% larger than would be required to handle present potential volumes from the lake; however, the fishermen are harvesting only 50% of the estimated lake potential.

A perpetuation of the current level of exploitation or a decrease in quotas to equal this level will necessitate the processing of rough fish or a closure of the plant.

RECOMMENDATIONS

- (15) The overall production from the lake should be maximized to approach the processing capacity of the plant.
- (16) If and when the Department of Indian and Northern Affairs makes the final payments for construction of the plant, the Freshwater Fish Marketing Corporation consider rebating to the fishermen the amortization costs which they have borne in the interim.

(b) Freight Costs

The Task Force was concerned over the 5¢/lb. freight cost from lakeside to the Winnipeg plant and questioned the need for shipping Great Slave Lake fish to the Winnipeg depot.

RECOMMENDATION

- (17) The freight costs from the primary producer to Winnipeg should be subsidized through equalization.

The Task Force addressed itself to the impact that the construction of the Mackenzie Valley pipeline could have on the Great Slave Lake fishing industry. The higher wages that will be offered could result in a decimation of the fishery; in which event, it will be necessary to subsidize the industry through this period in order to ensure its continuation.

1. Bond, W.A. MS 1974. *The Great Slave Lake Commercial Fishery, Summer, 1973.* Environment Canada, Tech. Report, Ser.No. CEN/T-74-8. 38 pp.
2. Kelcher, J.J. MS 1972. *Supplementary information regarding exploitation of Great Slave Lake salmonid community.* Fish. Res. Bd. Canada, Tech. Report, No. 298. 31 pp.
3. Duthie, A. and Flett, A.M. 1973. *1972 Great Slave Lake Gear Development - Project #1355-72* Environment Canada - Industrial Development Branch.