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***Nwt Exploratory Fishery Program; Rationale  
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FISHERIES "

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**DEPARTMENT OF FISHERIES AND OCEANS**

**CENTRAL MD ARCTIC REGION**

**NORTHWEST TERRITORIES EXPLORATORY FISHERY PROGRAM**

**RATIONALE**

(Revised May 1990)

**RATIONALE**

The Northwest Territories Fishery Regulations defines commercial fishing as "fishing for sale or barter". A waterbody or river must be listed on Schedule V of the Northwest Territories Fishery Regulations to be commercially fished. Many waterbodies and rivers in the Northwest Territories may have the potential for a commercial fishery but are not listed on Schedule V. The purpose of the Exploratory Fishery Program is to identify these areas and evaluate their potential as commercial fisheries. Those with potential will then be listed on Schedule V.

The Exploratory Fishery Program is designed to determine whether a sufficient number of marketable-sized fish are present in a waterbody to warrant commercial fishing.

The primary objective during the first year of the program is to gather biological data such as length, round weight, sex and/or maturity and aging structures from a sample of the catch. If the fish are small, in poor condition or not very abundant there is likely no commercial potential and the program should be discontinued. If, however, the fish are large, in good condition and abundant, there may be commercial potential.

The collection of catch and effort statistics is vital to the program. A provisional quota is assigned at the start and a good effort must be made to harvest the entire quota because the amount of effort expended provides a measure of the relative abundance of fish in the waterbody. If many nets are set over a wide area for a considerable length of time, yet the catch is insufficient to fill the provisional quota, it is likely that the fish are not very abundant. If, however, the entire quota is filled in a short period of time, the fish may be abundant enough to justify commercial fishing, provided they are of marketable size, and the program should continue if interest exists to do so.

During the second, third and fourth years of the program, no biological sample is required but accurate catch and effort statistics must be kept and effort must be made to harvest the entire quota each year. These effort data may indicate whether or not the amount of fish removed each year is reducing the number of fish in the stock. If it is, the stock is likely small, and the provisional quota is too high. This, in itself, is a measure of the commercial potential.

During the fifth, and last, year of the Exploratory Fishery Program a complete biological sample is again required, such as was done in year one. The results of the year-five sample are compared with those from year one to determine whether the constant rate of fishing over the five years has changed the biological composition of the stock. If the fish were large and old in the year-one sample, but small and young in the year-five sample, chances are the provisional quota was too high and is overexploiting the stock. Again, this is a measure of the commercial potential of the stock.

Catch and effort data are also collected in year five. If, after five years of fishing at a constant rate, there is no change in the biological composition of the stock (i.e. the fish are still of marketable size) or in the catch per unit of effort (ie the fish are still abundant) the stock is considered to have commercial potential, at least at the level it was harvested over the five year period.

During the five-year period of the exploratory fishery, any problems with harvesting, processing (dressing etc.), transportation and marketing of the catch will become evident. If, after the five-year period, the stocks still healthy and abundant and there are no other problems such as mentioned above, the waterbody will be submitted as a commercial fishery for inclusion in Schedule V of the Northwest Territories Fishery Regulations. Changes to Schedule V can take a year or two to pass through the regulatory process. In the meantime, commercial fishing can continue under an Exploratory Fishery Licence with no requirement for further sampling.