SCIENTIFIC PROTECTION OF NORTH AMERICA'S FRESH WATER

A group of Canadian Government scientists have been pursuing vital business in the waters of the Great Lakes imperilled by pollution. The men and women on the staff of the Canada Centre for Inland Waters at Burlington, Ontario, all experts in such disciplines as limnogeology and water quality, have been brought together for a vigorous campaign to arrest the misuse of fresh water, one of Canada's priceless resources.

Their task is to study the physical, biological and chemical properties of fresh water, as well as its economic and engineering aspects. The effects of flood and drought are also under study, as are practical solutions to existing problems of pollution. All these avenues of research are being explored with the help of many governmental, academic and industrial agencies and institutions.

NEW HQ AND EXTRA STAFF

The staff of 150, soon to increase to 300, will number 1,000 after its move into a new \$23.5-million building complex later this year. The Centre's offices and laboratories are housed at present in a park of interconnected trailers situated in the shadow of the Burlington Skyway's centre span. Three federal departments — Energy, Mines and Resources, National Health and Welfare, and the Fisheries Research Board — have provided personnel for the Centre. Universities, industry and other groups are also involved.



Water-quality monitor is lowered into the depths of Lake Ontario during winter science cruise.



Scene on deck of M.V. Martin Karlsen at one of the scientific stations in the middle of Lake Ontario.

The choice of Burlington as the Centre's headquarters has placed this unique research group in the geographical middle of the largest body of fresh water in the world. The Great Lakes (shared by Canada and the United States as part of a common boundary and a waterway for shipping, fisheries and recreation) contain enough water to cover Canada's ten provinces and two territories - almost four million square miles - to a depth of eight feet. Depending on this enomous volume of water are many great cities and agricultural lands containing 40 million people. This industrial area may, eventually become part of a megapolis stretching from Duluth, Minnesota, past Chicago, Detroit, Toronto, Montreal to Quebec City -1.000 miles of dense population dependant on plentiful fresh water.

The Canada Centre for Inland Waters also carries out research in other inland waters and is engaged on limnological research across the nation to British Columbia.

YEAR-ROUND PROBE

The big current inquiry, however, is in the Great Lakes, as research ships from Burlington continue their task of collecting scientific data all year round. They make regular visits to predetermined areas, taking water samples, specimens of the lake-bottom, cores of the underlying lake-bed and the organic materials floating in the water, and make a variety of other probes into the properties of the lake.