

History of Lake Winnipeg Research

Very little thorough research has been conducted on Lake Winnipeg. Prior to 2002, only 2 studies (in 1930 and 1969) had examined both spatial and temporal variability in the physical, chemical and biological components of the lake. Since 1969, there have been 5 smaller studies carried out by the Department of Fisheries and Oceans (DFO) and the Province of Manitoba. Although limited temporally (August), these studies had good spatial coverage of the lake and represented the main components of the food web.

1924, C.W. Lowe conducted an algal survey for “The Freshwater Algae of Canada” (Biological Board of Canada, 1927)

1930, Bajkov collected over 500 biological and chemical samples lake-wide during the 1920s.

1969, Brunskill et al. (Department of Fisheries and Oceans) collected and analyzed 300 baseline physical, chemical and biological samples from 50 lake-wide stations during 6 open-water cruises. (Fisheries Research Board of Canada, 1969)

1994 & 1996, Geological Survey of Canada and Manitoba Energy and Mines conducted a geophysical and hydrographic lake-wide survey to collect sediment cores as well as supplementary limnological samples (33 stations) for DFO staff.

1998, Department of Fisheries and Oceans conducted chemical, biological and contaminant sampling at 33 stations over 4 surveys.

International Joint Commission – International Red River Basin Task Force prepared *Influence of the 1997 Red River Flood on contaminant transport and fate in southern Lake Winnipeg*.

1998, Lake Winnipeg Research Consortium (LWRC) was formed to facilitate multidisciplinary research on the Lake Winnipeg ecosystem.

1999, Department of Fisheries and Oceans conducted a lake-wide survey in August to collect air, water and sediment for chemical and contaminant analyses, bacteria, plankton and benthos.

2002 to 2004, Lake Winnipeg Research Consortium facilitated three research surveys per year during the open-water season to sample the physical, chemical and biological attributes of Lake Winnipeg.

2005, Lake Winnipeg Research Consortium conducted one research survey in the fall.