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INLAND WATERS DIRECTORATE PUBLICATIONS - 1990

Except where otherwise noted, Inland Waters Directorate publications are available free of charge. With some exceptions, the documents listed here were published between 1980 and 1990. Most of those published before 1980 are out of print, but a complete list is available upon request. A single photocopy may be supplied of out-of-print documents (marked with an asterisk) or documents with limited distribution.

Most documents are available in both official languages, indicated by ${\tt E}$ (English) and ${\tt F}$ (French).

Bibliographic references with abstracts of Directorate publications may also be obtained by online access to the AQUAREF database produced by WATDOC and available on the CAN/OLE system of the Canada Institute for Scientific and Technical Information of the National Research Council Canada.

Requests for publications should be sent to:

Editorial and Publications Section Inland Waters Directorate Environment Canada Ottawa, Ontario KIA 0H3 (819) 997-2601

Addresses for Flood Damage Reduction Program maps and publications are listed in the appropriate section.

Regional Reports

Some reports not listed here are available directly from the two national research institutes and the regional offices of the Inland Waters Directorate.

National Water Research Institute Canada Centre for Inland Waters 867 Lakeshore Rd., P.O. Box 5050 Burlington, Ontario L7R 4A6 (416) 336-4884

National Hydrology Research Institute 11 Innovation Blvd. Saskatoon, Sask. S7N 3H5 (306) 975-5761

Inland Waters Directorate Atlantic Region Environment Canada 5th floor, Queen's Square 45 Alderney Drive Dartmouth, N.S. B2Y 2N6 (904) 426-3266

Centre de documentation Centre Saint-Laurent 105 rue McGill, 4⁹ étage Montréal (Québec) H2Y 2E7 (514) 283-2762

Inland Waters Directorate Ontario Region Environment Canada P.O. Box 5050 867 Lakeshore Road Burlington, Ontario L7R 4A6 (416) 336-4532

Inland Waters Directorate Western and Northern Region Environment Canada Motherwell Building 1901 Victoria Avenue Regina, Saskatchewan S4P 3R4 (306) 780-5324 Inland Waters Directorate Pacific and Yukon Region Environment Canada 224 West Esplanade North Vancouver, B.C. V7M 3H7 (604) 666-3357

WATDOC Inland Waters Directorate Department of the Environment Ottawa, Ontario K1A 0H3 (819) 953-1531

Priced Publications

These publications are available from:

Publishing Centre Supply and Services Canada Ottawa, Ontario KlA 059 (819) 956-4800

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GENERAL INFORMATION

Federal Water Policy, 1987. (E,F)

The Federal Water Policy is a statement of the federal government's philosophy and goals for the nation's freshwater resources, and of the proposed ways of achieving them.

Federal Water Policy - A Progress Report, March 1990 (E,F)

The first report on progress in implementing the Federal Water Policy.

A Primer on Water - Questions and Answers (E,F)

Answers a wide range of questions on different aspects of water: its physical characteristics, its availability both above and below ground, its uses, and how it is shared and managed. Also contains practical advice on conserving water for future generations.

National Water Research Institute - Hydraulics Laboratory. 1982 (E,F)

The large modern hydraulics laboratory operated by NWRI at the Canada Centre for Inland Waters at Burlington, Ontario contains equipment which is highly specialized and in most cases not found in hydraulics laboratories elsewhere. The laboratory also operates a large offshore research tower situated in Lake Ontario near Hamilton. In addition to its primary function as an Environment Canada research facility, the Hydraulics Laboratory makes its facilities and services available to governmental or private organizations on a cost recovery basis. This illustrated document describes the equipment installed in the Hydraulics Laboratory and provides operating specifications.

Water Resources Research Support Program 1986-1987 (E,F)

The Water Resources Research Support Program of Environment Canada supports water-related environmental research in the Canadian university research community. This report contains descriptions of research agreements with the universities involved.

The Canada Water Act Annual Report, 1989-90 (E,F)

The Canada Water Act, proclaimed on September 30, 1970, provides the framework for joint federal-provincial management of Canada's water resources. This, the sixteenth annual report, covers operations to March 31, 1989.

Canada Water Year Book 1975 (E,F)

Price \$4.95 (\$5.95 outside Canada)

This publication is the first in the series on freshwater resources in Canada.

Canada Water Year Book 1976 (E,F)

Price \$3.50 (\$4.20 outside Canada)

This 1976 edition of the Canada Water Year Book is the second in the series on freshwater resources in Canada. It covers water resource planning and management; water use and development; floods and flood control; and water research in Canada.

Canada Water Year Book 1977-1978 (E,F)

Price \$3.50 (\$4.20 outside Canada)

The 1977-1978 Year Book deals briefly with the importance of water data to society; provides in-depth descriptions of the basic field, office and laboratory programs collecting the data; and in general, imparts information on the types of water data that are available and where they can be obtained.

Canada Water Year Book 1979-1980 (E,F)

Price \$5.00 (\$6.00 outside Canada)

The 1979-1980 Year Book provides an overview on water research in Canada. Its approach is to break this complex subject into six major components and to highlight the main activities within each component.

Canada Water Year Book 1981-1982 (E,F)

Price \$7.00 (\$8.40 outside Canada)

Some of the subjects in the 1981-1982 Year Book include Water and the Canadian Economy, Water - Its Availability and Use in Canada, Water Resources Planning and Management in Canada, and certain Environment Canada programs related to climate and toxic substances.

Canada Water Year Book 1985 (E,F)

Price \$9.95 (\$11.95 outside Canada)

The theme for this edition, water use in Canada, is based mainly upon actual surveys of water users in 1981.

GENERAL INFORMATION

Users Manual: Unsteady, nonuniform, Mobile Boundary Flow Model - MOBED (E)

B.G. Krishnappan, 1981.

A mathematical model to predict the unsteady flow characteristics in mobile boundary channel flows (MOBED) is described. The model MOBED can be used for predicting both the short— and long-term effects of changes to the regime of a natural stream imposed by man and/or nature and hence could form a useful tool in the field of water resource management.

MOBED Users Manual Update I (E,F)

B.G. Krishnappan, 1983.

Since the publication of the original users manual of MOBED in 1981, several changes have been made to reflect feedback from the users. This update gives details of these changes and a listing of the revised model.

MOBED Users Manual Update II (E,F)

B.G. Krishnappan, 1986.

A sediment sorting algorithm has been added to model MOBED to extend the model to predict the effects of armouring of stream beds. Details of the algorithm and the changes made to the model since the publication of Update I are described in this update.

- S Reflections 1988-89 Executive Director's Report, National Water Research Institute.
- \$ Current Research '89 A Synopsis of the 1988-1989 Research Program at the National Water Research Institute
- § Publications 1980-1987 (bibliography of reports and papers from National Water Research Institute)
- § National Water Research Institute Digest (quarterly public newsletter of the National Water Research Institute)
- §§ National Hydrology Research Centre Annual Report 1988-1989
- §§ National Hydrology Research Centre (NHRC) Notes (quarterly newsletter of the National Hydrology Research Centre
- SS NHRI Contribution Series

All papers prepared for external use by authors at the National Hydrology Research Institute. Includes submissions to referred and other journals, conference papers and abstracts, progress and other reports to outside agencies. Distribution is limited, but a list is available on request.

- § Science Liaison Division National Water Research Institute P.O. Box 5050 Burlington, Ontario L7R 4A6 Tel.: (416) 336-4884
- \$\$ Scientific Liaison and Systems Division National Hydrology Research Institute 11 Innovation Boulevard Saskatoon, Saskatchewan S7N 3H5 Tel.: (306) 975-5751

GENERAL INTEREST BROCHURES

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Water Perspective: The Work of the Inland Waters Directorate (E,F)
  Water ... our element: National Hydrology Research Institute (E,F)
  Good water ... a vital need (E,F)
  NAQUADAT - National Water Quality Data Base (E,F)
  Surveying Canada's Water (E,F)
  The Canada Centre for Inland Waters (E,F)
  Coping with the Great Lakes (E,F)
  National Water Research Institute (E,F)
  Sweetwater Seas: The Legacy of the Great Lakes (E,F)
 Water Quality - Atlantic Region (E,F)
 Water Quality - Quebec Region (E,F)
 Water Quality - Ontario Region (E,F)
 Water Quality - Western and Northern Region (E,F)
* Water Quality - Pacific and Yukon Region (E,F)
 Managing the Waters of the Ottawa River (E,F)
 The Mackenzie, Canada's Largest River Basin Looks to the Future (E,F)
 Cutting Our Flood Losses (E,F)
 WATDOC (E,F)
 National Water Quality Laboratory (E,F)
 National Hydrology Research Centre (E,F)
 Is the Water Safe to Use (E,F)
* How Safe is Our Water? (E,F)
 How Safe is our Water? (Poster) (E,F)
 Water is Life, 1989 (Poster) (E,F)
 Municipal Water Rates in Canada - Current Practices and Prices (E,F)
 Water Fact Sheets
      A series of fact sheets on the world water supply, Canada's freshwater and the problems
      associated with distribution, conservation and pollution. Future fact sheets will cover
      topics such as floods and drought, water use, aquatic ecosystems, and the aesthetic
      qualities of water. Useful as a tracking aid.
 #1. Water - Nature's Magician
      (states and properties of water, hydrologic cycle)
 #2. Water - here, there and everywhere
      (world's water supply and the forms in which it is found, Canada's major drainage areas)
 #3. Clean Water - a priceless asset
      (water quality, including pollution, acid rain and what we can do to improve water quality)
 #4. Water Works!
      (Water use, conservation, pricing)
 #5. Groundwater - Natures Hidden Treasure
      (Where it's found, how it's found, problems and issues associated with it)
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- 112. Lake Water Nutrient Chemistry and Chlorophyll-a in Pasqua, Echo, Mission, Katepwa, Crooked and Round Lakes on the Qu'Appelle River, Saskatchewan (E,F)
 - R.J. Allan and M. Roy, 1980.
- 113. St. Lawrence River Water Quality Surveys, 1977 (E,F)
 C.H. Chan, 1980.
- 114. N.H.R.I. Paper No. 11: Morphology, Hydrology and Hydrochemistry of Karst in Permafrost Terrain near Great Bear Lake, Northwest Territories (E,F)
 - R.O. van Everdingen, 1981.
- 115. Atmospheric Bulk Precipitation in the Great Lakes Basin (E,F)
 K.W. Kuntz, 1980.
- 116. N.H.R.I. Paper No. 13: Hydrogeological and Hydrochemical Investigation of the Waste Disposal Basin at I.M.C.C. K2 Potash Plant, Esterhazy, Saskatchewan
 J.A. Vonhof, 1983.
- 117. The Effects of Upstream Impoundments on the Limnology of Kootenay Lake, B.C. (E,F)

 R.J. Daley, E.C. Carmack, C.B.J. Gray, C.H. Pharo, S. Jasper and R.C. Wiegand, 1981.
- 118. Susceptibility of Aquatic Ecosystems to the Effects of Atmospheric Pollutant Fallout in Quebec (E,F)
- N.H.R.I. Paper No. 10: A Hydrogeochemical Study of Contaminant Attenuation and Remobilization in the Big Swamp Overburden near Picton, Ontario (E, F)D.E.J. Creasy, R.J. Patterson and W.A. Gorman, 1981.
- 120. Loading Estimates to Lake Erie, 1967-1976 (E,F)

 A.S. Fraser and K.E. Willson, 1981.
- 121. N.H.R.I. Paper No. 14: Salt-Water Intrusion in a Layered Coastal Aquifer at York Point, Prince Edward Island (E,F)
 Garth van der Kamp, 1981.
- 122. A Study of Selected Great Lakes Coastal Marshes (E,F)
 A. Mudroch, 1981.
- 123. Some Paleolimnological Aspects of the Most Recent Sediments of Lac Laflamme (Laurentides Provincial Park, Quebec) in Relation to Atmospheric Transportation of Pollutants (E,F)
 M. Ouellet, 1981.
- 124. Methods of Studying Population Shifts in Aquatic Bacteria in Response to Environmental Change (E,F)
 - M.A. Holder-Franklin, 1981.
- N.H.R.I. Paper No. 9: Program LAYOUT An Interactive Program to Handle Page Layout for Documentation of Computer Files Printed On-Line at Remote Terminals (E,F)
 W.C. Horwood and K.U. Weyer, 1980.
- 126. A Review of Benzothiazoles in the Aquatic Environment (E,F)

 B. Brownlee, J.H. Carey and M.E. Fox, 1981.

- 127. Flood Plain Management A Hydro-Economic Analysis (E,F)

 Nassir El-Jabi, Jean Rousselle, François Brière and Daniel LeBlanc, 1982.
- 128. Seasonal Variation of Nitrogen and Phosphorus Species in the Red River (E,F)

 V.T. Chacko, B.C.S. Chu and Wm. Gummer, 1981.
 - 129. Water Quality of the Upper Niagara River, 1975 and 1979 (E,F)
 K.W. Kuntz and C.H. Chan, 1982.
- * 130. Impact of Oil and Oil-Dispersant Mixtures on Freshwater Pond Ecosystems (E,F)

 B.R. Scott, B.J. Dutka, J.P. Sherry, V. Glooschenko, P.J. Wade, W.D. Taylor, E. Nagy,
 N.B. Snow and D.B. Carlisle, 1982.
 - 131. Summary Report, The OECD Cooperative Programme on Eutrophication, Canadian Contribution (E,F))

 Lorraine L. Janus and Richard A. Vollenweider, 1981.
 - 132. Ottawa River Water Quality, National Capital Region, 1978 (E,F)

 J.C. Merriman and R.C. McCrea, 1982.
 - 133. Trace Metals in Lake Ontario, 1979 (E,F)

 Melanie A. Neilson, 1983.
 - 134. Simulation of Lake Erie Water Quality Responses to Loading and Weather Variations (E,F)

 D.C.L. Lam, W.M. Schertzer and A.S. Fraser, 1983.
 - The Fate and Effects of Contaminants in Canagagique Creek.
 Stream Ecology and Identification of Major Contaminants (E,F)
 J.H. Carey, M.E. Fox, B.G. Brownlee, J.L. Metcalfe, P.D. Mason and W.H. Yerex, 1983.
 - 136. Statistical Assessment of the Great Lakes Surveillance Program, 1966-1981, Lake Erie (E,F)
 Edited by A.H. El-Shaarawi, 1984.
 - 137. Biological Considerations for Open Water Disposal of Dredged Material in the Great Lakes (E,F)

 P.G. Sly, 1984.
 - 138. Biogeochemical Pathways of Phosphorus, Heavy Metals and Organochlorine Residues in the Bow and Oldman Rivers, Alberta, 1980-1981 (E,F)

 D.P. Blachford and E.D. Ongley, 1984.
 - 139. Lake Ontario Water Chemistry Atlas (E,F)
 Hugh F.H. Dobson, 1985.
 - 140. Application of Direct Measurements of Optical Parameters to the Estimation of Lake Water Quality Indicators (E,F)
 - R.P. Bukata, J.E. Bruton and J.H. Jerome, 1985.
 - N.H.R.I. Paper No. 23: Contaminant Hydrogeology of Toxic Organic Chemicals at a Disposal Site, Gloucester, Ontario.
 1. Chemical Concepts and Site Assessment (E,F)
 - R.E. Jackson, R.J. Patterson, B.W. Graham, J. Bahr, D. Belanger, J. Lockwood and M. Priddle, 1985.

- 142. The Role of Particulate Matter in the Fate of Contaminants in Aquatic Ecosystems Part I. Transport and Burial Part II. Bioavailability, Recycling and Bioaccumulation
 - R.J. Allan, 1986.

V.T. Chacko, 1986.

M.E. Alford and E.C. Carmack, 1987.

- 143. Water Quality of the Lake Huron-Georgian Bay System (E,F)
 R.J.J. Stevens, M.A.T. Neilson and N.D. Warry, 1985.
- 145. N.H.R.I. Paper No. 26: Ground-water Supply, Fraser Lowland, British Columbia (E,F)
 E.C. Halstead, 1986.
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 Pierre Ouellette, Nassir El-Jabi and Jean Rousselle, 1986.
- 147. A Program for Estimating the Point of Change and Degree in Polynomial Regression (E,F) S.R. Esterby, 1985.
- 148. N.H.R.I. Paper No. 27: Retention of ¹³⁷Cs and ⁹⁰Sr by Mineral Sorbents Surrounding Vitrified Nuclear Waste (E,F)

 K.E. Lyon and R.J. Patterson, 1986.
- 149. N.H.R.I. Paper No. 30: Hydraulic Characterization of a Small Ground-water Flow System in Fractured Monzonitic Gneiss (E,F)K.G. Raven, 1986.
- 150. Water Quality in Selected Canadian River Basins St. Croix, St. Lawrence, Niagara, Souris, Fraser Estuary (E,F)

 Edited by R.E. Kwiatkowski, 1986.
- 151. Water Quality Branch Strategy for Assessments of Aquatic Environmental Quality (E,F)
 G.D. Haffner, 1986.
- N.H.R.I. Paper No. 32: Observations on Ice Cover and Streamflow in the Yukon River near Whitehorse during 1983-84 (E,F)
 M.E. Alford and E.C. Carmack, 1987.
- N.H.R.I. Paper No. 33: Reconnaissance of the Chemical and Biological Limnology in Four Large Lakes of the Yukon River Basin (E,F)R.A. Kirkland and C.B.J. Gray, 1986.
- 154. Nutrient Characterization of Souris River at Coulter, Manitoba, during Low Flow Years (E,F)
- 155. N.H.R.I. Paper No. 34: Observations on Ice Cover and Streamflow in the Yukon River near Whitehorse during 1984/85 (E,F)
- 156. Radionuclide Content of Some Canadian Surface Waters: A Report on the National Radionuclides Monitoring Program, 1981-1984 (E,F)

 A.S. Baweja, S.R. Joshi and A. Demayo, 1987.
- 157. N.H.R.I. Paper No. 35: Physical Limnology of an Ice-Covered Lake with Through-Flow: Lake Laberge, Yukon Territory (E,F)

 E.C. Carmack, R.C. Wiegand, E.M. Marles, M.E. Alford and V.A. Chamberlain, 1987.

- 158. Surveys of Trace Contaminants in the St. Clair River, 1985 (E,F)

 C.H. Chan and J. Kohli, 1987.
- 159. Organochlorine Contaminants in Ambient Waters of Lake Ontario (E,F)

 J. Biberhofer and R.J.J. Stevens, 1987.
- 160. N.H.R.I. Paper No. 31: Hydrogeological Characterization of the East Bull Lake Research Area (E,F)K.G. Raven, D.J. Bottomley, R.A. Sweezey, J.A. Smedley and T.J. Ruttan, 1987.
- 161. An Economic Assessment of the Flood-Plain Zoning Program in the Outaouais Region (E,F)

 P. Morissette, P. Ouellette, N. El-Jabi, D. Leblanc and J. Rousselle, 1988.
- N.H.R.I. Paper No. 40: Observations on Ice Cover and Streamflow in the Yukon River near Whitehorse during 1985-86 (E,F)
 M.E. Alford and E.C. Carmack, 1988.
- 163. Modelling the Dissolved Oxygen Change in Streams using Nonlinear Regression Analysis (E,F)

 A.H. El-Shaarawi, A. Maul and B.G. Brownlee, 1988.
- 164. Criteria for Basin Selection and Sampling Station Macrolocation (E,F)
 L. Désilets, 1988.
- N.H.R.I. Paper No. 41: Phosphorus Control of Algal Production and Biomass in the Thompson River, British Columbia (E,F)
 M.L. Bothwell, S. Jasper and R.J. Daley, 1989.
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 R.P. Bukata, J.E. Bruton, J.H. Jerome and W.S. Haras, 1989.
- 168. Canadian Water Quality Guidelines for Atrazine (E,F)

 D.M. Trotter, A. Baril and M.P. Wong, 1990.
- 169. Canadian Water Quality Guidelines for Carbofuran (E,F)

 D.M. Trotter, R.A. Kent and M.P. Wong, 1989.
- 170. Canadian Water Quality Guidelines for Glyphosate, (E,F)
 D.M. Trotter, A. Baril, M.P. Wong and R.A. Kent, 1990.
- 171. The Circulation of Lake Ontario during the Summer of 1982 and the Winter of 1982/83 (E,F)
 T.J. Simons and W.M. Schertzer, 1989.
- 172. Strategy for Monitoring the Exposure and Effects of Contaminants in the Aquatic Environment (E,F)

 L. Désilets and R. Kwiatkowski, 1989.
- 173. NHRI Paper No. 43: The Use of Morphological Deformities in Chironomid Larvae for Biological Effects Monitoring (E,F)W.F. Warwick, 1990.
- 174. Tracing the Movement of Fine-Grained Sediment in Aquatic Systems: A Literature Review J.P. Coakley and B.F.N. Long, 1990.
- 175. Yukon River Headwater Lakes Study 1983-1985: Observations and Analysis
 P.F. Hamblin, 1990.
- 176. NHRI Paper No. 44: Dynamics of Phosphorus in a Chain of Lakes: The Fishing Lakes
 Bernard C. Kenney, 1990.

TECHNICAL BULLETIN

- 115. Content and Distribution Pattern of 2,4-D in the Red River (E,F)

 V.T. Chacko and Wm. D. Gummer, 1980.
- 116. Development of an Oil Spill Model for the St. Lawrence River (E,F)
 M. Fingas and M. Sydor, 1980.
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 H. Schreier and J. Taylor, 1980.
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- 120. Adaptation of the ILLUDAS Model to a Desk-Top Computer (E,F)
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- 121. Dissolved Oxygen Modelling of the St. Croix River in Maine and New Brunswick (E,F)
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 B.P. Sangal, 1981.
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 J.S. Ford (ed.), 1982.
- * 124. Acid Precipitation Sensitivity of Canada's Atlantic Provinces (E,F)

 T.A. Clair, J.P. Witteman and S.H. Whitlow, 1982.
 - 125. N.H.R.I. Paper No. 17: One-dimensional model of unconfined ground water flow over a sloping impermeable base (E,F)
 A. Vandenberg, 1982.
 - 126. Lake Ontario Surveillance Data, 1968-1980 (E,F)

 R.E. Kwiatkowski and M.A.T. Neilson, 1983.
 - 127. Measurement of Lead, Cadmium, Arsenic and Mercury in Precipitation Events (E,F)
 M.C. Mehra, 1982.
 - 128. Evaluation of an Organic Automated Rain Sampler (E,F)
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 - 129. The Canadian Network for Sampling Organic Compounds in Precipitation (E,F)
 P. Brooksbank, 1983.
 - 130. Documentation of the Averaging Lake Data by Regions (ALDAR) Program (E,F)

 M. Neilson, R. Stevens and J. Hodson, 1984.
 - An Investigation of Contaminants and Benthic Communities in the Major Rivers of the Hudson Bay Lowland, Ontario (E,F)
 R.C. McCrea, R.E. Kwiatkowski, D.E. Campbell, P.P. McCarthy and T.A. Norris, 1984.

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- 132. N.H.R.I. Paper No. 22: Base Flow Characteristics of Ontario Streams (E,F)
 B.P. Sangal, 1984.
- 133. Shipboard Analysis of Soluble Nutrients in Lake Water versus Analysis after Storage (E,F)
 M.A. Neilson and A.H. El-Shaarawi, 1984.
- 134. Toxic Contaminants in the Niagara River, 1975-1982 (E,F)

 K.W. Kuntz, 1984.
- 135. Dissolved Oxygen Modelling of the St. Croix River Comparison of Models (E,F)
 W. Boutot and G. Howell, 1985.
- 136. Trace Organic Contaminants in the Ottawa River, National Capital Region, 1980 (E,F)

 J.C. Merriman and R.C. McCrea, 1985.
- 137. N.H.R.I. Paper No. 25: A Physical Model of Vertical Infiltration, Drain Discharge and Surface Runoff (E,F)

 A. Vandenberg, 1985.
- 138. Design and Testing of an Aqueous Phase Liquid-Liquid Extractor (APLE) for the Determination of Organochlorine Contaminants (E,F)

 R.C. McCrea and J.D. Fischer, 1985.
- 139. Limnological Survey Techniques from Small Aircraft (E,F)
 E.W. Marles, 1985.
- 140. N.H.R.I. Paper No. 28: Ground-water Use in Canada, 1981 (E,F)
 Paul J. Hess, 1986.
- 141. N.H.R.I. Paper No. 29: Recursion Formula for Unit Hydrographs (E,F)
 B.P. Sangal, 1986.
- 142. Water Quality at the Inlet to the St. Lawrence River, 1977 to 1983 (E,F)

 A. Sylvestre, K.W. Kuntz and N.D. Warry, 1987.
- 143. Prototype Designs for Surveys and Measurement in an Aquatic Environment, 1984 (E,F) Edited by J.S. Ford, 1986.
- 144. Organochlorines and Polyaromatic Hydrocarbons in the St. Lawrence River at Wolfe Island, 1982-1984 (E,F)

 A. Sylvestre, 1987.
- 145. A Comparison of Wet and Bulk Deposition at Woodbridge, Ontario, 1979-1981 (E,F)

 C.H. Chan and L.H. Perkins, 1987.
- 146. Recent Trends in Water Quality of the Niagara River (E,F)
 K.W. Kuntz, 1988.
- 147. Contaminants in Bottom Sediments of the St. Lawrence River in June 1975 (E,F)
 K.W. Kuntz, 1988.
- 148. Trace Organic Contaminants in the Bottom and Suspended Sediments of the International Section of the St. Lawrence River (E,F)
 J.C. Merriman, 1987.

TECHNICAL BULLETIN

- 149. An Automated Computer-Based Water Quality Analytical Laboratory Data Capture/Management System (AWQUALABS) (E,F)
 - F.J. Philbert, J.E. Dowell, J. Hodson and G.S. Beal, 1987.
- 150. Experiences Gained in System Design, Development, and Implementation of an Automated, Computer-Based Water Quality Analytical Laboratory Data Capture/Management System (E,F)
 - G.S. Beal, F.J. Philbert and J.E. Dowell, 1987.
- 151. N.H.R.I. Paper No. 36: A Hybrid Numerical-Analytical Method for the Solution of Partial Differential Equations in Ground-Water Modelling (E,F)
 - A. Vandenberg, 1987.
- 152. N.H.R.I. Paper No. 37: A Forward Finite Difference Procedure with Exponentially Increasing Time Steps: The Method of Successive Squaring (E,F)
 - A. Vandenberg, 1987.
- 153. Bottom Sediment Quality of the Ottawa River (E,F)
 - J.C. Merriman, 1987.
- 154. N.H.R.I. Paper No. 38: Water Use in the Coal Mining Industry and its Influence on Ground Water in Western Canada (E,F)
 - W.B. Barrie and C.H. Carr, 1988.
- 155. N.H.R.I. Paper No. 39: A Numerical Simulator for Flow and Transport in Stochastic Discrete Fracture Networks (E,F)
 - A. Rouleau, 1988.
- 156. Long-Range Transport of Airborne Pollutants (LRTAP) Aquatic Effects Monitoring Program (E,F)
 - P. Brooksbank, J. Haemmerli, G. Howell and L. Johnston, 1989.
- 157. A Large-Sample Extractor for Determining Organic Contaminants in the Great Lakes (E,F)

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 I.A. Reid and J.O.G. Charbonneau, 1980.
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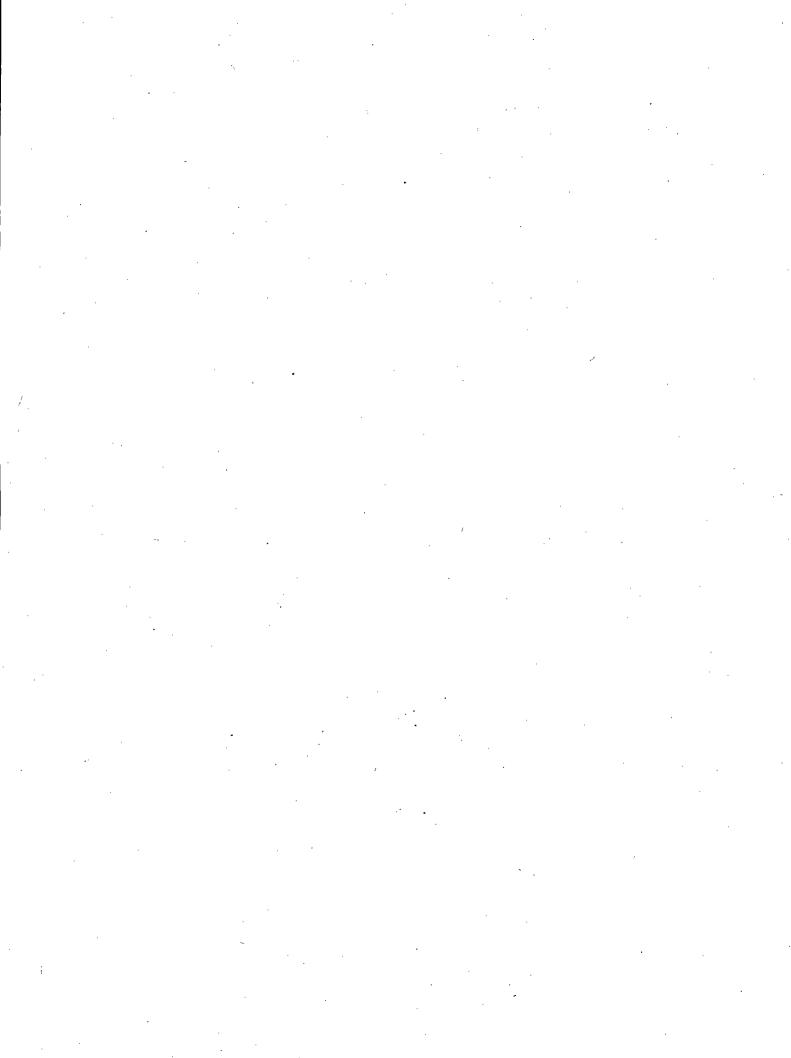
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- 6. Creep and Glide Processes in Mountain Snowpacks (E)
 David M. McClung, 1980.
- 9. Program LAYOUT An Interactive Program to Handle Page Layout for Documentation of Computer Files Printed On-Line at Remote Terminals, Scientific Series no. 125. (E,F)
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- 13. Hydrogeological and Hydrochemical Investigation of the Waste Disposal Basin at I.M.C.C. K2 Potash Plant, Esterhazy, Saskatchewan, Scientific Series no. 116. (E)
 - J.A. Vonhof, 1983.
- 14. Salt-Water Intrusion in a Layered Coastal Aquifer at York Point, Prince Edward Island, Scientific Series no. 121. (E.F)
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- *15. Albedo Survey on Andrei Glacier, Iskut River Basin, B.C., Midsummer, 1980 (E)
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- 16. A practical method of estimating Peak from Mean Daily Flows with Application to Streams in Ontario, Technical Bulletin no. 122. (E,F)
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 - B.P. Sangal, 1984.
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 - R.E. Jackson, R.J. Patterson, B.W. Graham, J. Bahr, D. Belanger, J. Lockwood and M. Priddle, 1985.

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- 33. Reconnaissance of the Chemical and Biological Limnology in Four Large Lakes of the Yukon River Basin, Scientific Series no. 153. (E,F)

 R.A. Kirkland and C.B.J. Gray, 1986.
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- 39. A Numerical Simulator for Flow and Transport in Stochastic Discrete Fracture Networks, Technical Bulletin no. 155. (E,F)
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 - W.F. Warwick, 1990
- 44. Dynamics of Phosphorus in a Chain of Lakes: The Fishing Lakes, Scientific Series no. 176. (E,F)
 - Bernard C. Kenney, 1990.
- 45. On the Dynamics of Phosphorus in Lake Systems, Scientific Series no. 182. (E,F)

 Bernard C. Kenney, 1990.



SURFACE WATER DATA

REFERENCE INDEX - SURFACE WATER DATA STATIONS (Biennial) (E,F)

A list of past and present surface water gauging stations in Canada. The 1986 Reference Index is currently available; also available is a Map Supplement showing location of gauging stations to 1977.

A separate index for Quebec is available from the Quebec Department of Natural Resources, Quebec, Que.

SURFACE WATER DATA (Annual) (E,F)

Streamflow and water level records for:

Alberta
Atlantic Provinces
British Columbia
Manitoba
Ontario
Quebec
Saskatchewan
Yukon and Northwest Territories

Data in this series have been published annually since 1965, prior to which data were published in the Water Resources Papers series, now out of print.

Data for stations in Quebec operated by the Province of Quebec are available from the Department of Natural Resources, Quebec, Que.

HISTORICAL STREAMFLOW SUMMARY (Biennial) (E,F)

A summary of historical monthly and annual mean discharges and annual extremes for the entire period of record for all past and present streamflow stations listed in the Surface Water Data Publications. The Summaries are published on a provincial and territorial basis every two years; currently available are the Summaries to 1988.

HISTORICAL WATER LEVELS SUMMARY (Biennial) (E,F)

A summary of historical monthly and annual mean water levels and extremes for the entire period of record for all past and present water level stations listed in the Surface Water Data publications. The summaries are published on a provincial and territorial basis every two years; currently availabe are the Summaries to 1988.

SEDIMENT DATA

SEDIMENT DATA (Annual) (E,F)

Suspended sediment data records are available for:

Alberta
Atlantic Provinces
British Columbia
Manitoba
Ontario
Quebec*
Saskatchewan
Yukon and Northwest Territories

The following data are included in each of the publications listed above: streamflow, mean suspended sediment discharges, mean suspended sediment concentration, instantaneous concentration, particle-size distributions for the depth-integrating method and some point-integrating measurements, particle-size distribution of bed load, particle-size distribution of bed material, dissolved solids information for some samples, and water temperatures at time of sampling.

These publications also contain an historical summary comprising period of record, type of operation, maximum daily load, and total load for the period of record. As well, a summary for standard periods is provided, giving information such as mean load, historical mean load and the standard error of the mean percent. The publication available currently is the 1989 edition.

^{*}The 1986 Quebec publication is not available, as no data were collected for that year. The historical information, however, is available on request.

REFERENCE INDEX - SEDIMENT DATA CANADA (Biennial) (E,F)

The Reference Index lists past and present sediment data collected at sediment stations in Canada, giving the period of record and the type of data available; the total number of samples of each type collected is also included. The publication available currently is the 1988 edition.

MISCELLANEOUS SEDIMENT DATA 1966 TO 1983 (E,F)

Suspended sediment miscellaneous data for 520 stations for Canada are included which had not previously been published in the annual Sediment Data publication. The following data are included in this one—time publication: date and time of sample collection, instantaneous discharge or daily mean discharge, sampling vertical, instantaneous concentration, dissolved solids for some samples, type of sampler used, particle size distribution for some depth—integrated samples and/or measurements, and some point—integrated measurements, the percent sand silt and clay is also included, particle size distribution of bed load, particle size distribution of bed material, and the water temperature at time of sampling for some samples is also given where available.

WATER QUALITY DATA -

Water quality data collected at approximately 5000 sampling stations on major rivers and streams in Canada since 1960 are stored in the NAQUADAT data system in Ottawa. The data are accessible by remote dial-up computer terminals across Canada. Specific data and guides to the NAQUADAT system may be obtained from Water Quality Branch, Inland Waters Directorate, Department of the Environment, Ottawa, Ontario, K1A 0H3.

WATER QUALITY DATA PUBLICATIONS (E,F)

The water quality data summary series presents simple statistics describing water quality and provides an indication of the data available on the NAQUADAT storage/retrieval system. In most of the volumes in the series a map of sampling locations is included.

The Water Quality Data Series consists of the following data summaries:

British Columbia 1961-1971 Alberta 1961-1973 Prince Edward Island 1961-1973 Northwest Territories 1960-1973 Yukon 1961-1973 Saskatchewan 1961-1975 Manitoba 1961-1976 New Brunswick 1961-1977 Nova Scotia 1965-1978 Newfoundland 1965-1980 Newfoundland 1981-1985

- * St. Lawrence River, Quebec 1950-1980.
- * Mackenzie River Basin 1960-1979.

The Detailed Surface Water Quality Data Consists of:

Alberta 1974-1976
Alberta 1977-1979
Alberta 1980-1981
Manitoba 1977-1979
Manitoba 1977-1979
Manitoba 1980-1981
Saskatchewan 1974-1976
Saskatchewan 1977-1979
Saskatchewan 1980-1981
Northwest Territories 1974-1976
Northwest Territories 1977-1979
Northwest Territories 1980-1981

Alberta, Manitoba, Northwest Territories and Saskatchewan 1982 Alberta, Manitoba, Northwest Territories and Saskatchewan 1983

WATER QUALITY REPORTS

Water Quality Sourcebook: A Guide to Water Quality Parameters (E,F)

R.N. McNeely, V.P. Neimanis and L. Dwyer, 1979.

Water Quality Interpretive Report No. 5: Water Quality. Mackenzie River Basin Study Report Supplement 9 (E)

Mackenzie River Basin Committee, 1985.

* Analytical Methods Manual (E,F)

Inland Waters Directorate

Describes and updates methods and procedures used in the Water Quality Branch analytical laboratories for analysing waters and other media such as wastes and sediments associated with water systems.

Sampling for Water Quality. 1983 (E,F)

The first edition of this manual describes field procedures for the sampling of surface water, precipitation, sediments and microbiological organisms, which are employed by the Water Quality Branch in its monitoring program to assess the quality of waters in Canada.

Water Quality Branch Publications 1988 (E,F)

This bibliography lists studies carried out by the Water Quality Branch of the Inland Waters Directorate in 1988.

Lists are also available for previous years, starting with 1978.

The Business of the Water Quality Branch. 1985 (E,F)

The organization, mandate and activities of the Water Quality Branch are outlined.

Water Quality in the Ottawa River

2nd Progress Report of the Ottawa River Water Quality Coordinating Committee to the Government of Canada and Ontario (E,F) 1989.

Canadian Water Quality Guidelines (1987) (E,F)

The first edition of Canadian Water Quality Guidelines compiled the currently available information on the effects of physical, chemical, and biological parameters on the water quality of freshwater ecosystems in Canada. Recommendations in the form of numerical limits or narrative statements are included for the protection and support of five major water uses in Canada: freshwater aquatic life; agriculture (including livestock watering and irrigation); raw water for drinking; recreation and industry. These guidelines and the supporting information provide the scientific basis for assessing water quality and for promoting the wise use of Canadian water resources.

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FLOOD DAMAGE REDUCTION PROGRAM

The Flood Damage Reduction Program is a cooperative undertaking by the federal government and the governments of the provinces to identify flood plain lands subject to periodic flooding and to reduce flood damage in these areas by a series of measures designed to discourage further unsuitable development. Information on the Flood Damage Reduction Program and its application in specific areas is contained in the documents listed below. All these publications as well as technical maps and reports produced under the Flood Damage Reduction Program are referenced in the AQUAREF database. Microfiche copies of the technical reports and maps have been deposited in Environment Canada's Departmental library and with the Canada Institute for Scientific and Technical Information.

Some publications such as pilot projects, are out of print. Copies may still be available in libraries or in local offices of the government of Canada or the province concerned.

Availability of English and French versions is $^{\bullet}$ immediately following the summary description indicated as: (E): English

(F): French

(B): Bilingual

Addresses where the publications can be obtained are indicated by numerical indicator in the description; the corresponding address is shown on the accompanying list of addresses.

NATIONAL PUBLICATIONS

A set of pamphlets on various aspects of flooding and flood damage reduction. (E, F) Available from (1).

LEARN THE FACTS ABOUT FLOODS (1988)

Provides an overview of flooding in Canada: causes, damages and misconceptions.

REDUCING FLOOD DAMAGE (1988)

Provides an overview of the flooding problem in Canada and explains what the FDR program is about.

FLOODPROOFING (1988)

Explains why and what should be floodproofed.

EMERGENCY MEASURES (1988)

Identifies that many government agencies as well as individuals themselves have to plan ahead of time to minimize the potential disaster of flooding.

FLOOD-RISK MAPPING (1988)

Explains the purpose and what is shown on flood risk maps produced under the FDR Program.

FLOOD: A SHARED RESPONSIBILITY (1988)

Identifies the causes of flooding and the types of flood damage, explains the limitations of building flood control works such as dams and dykes, and points out how we are all affected by flooding.

FLOOD WARNING (1988)

Explains what flood forecasting is and how it can be beneficial.

THE ROLE OF REALTORS IN FLOOD DAMAGE REDUCTION (1988)

Identifies the existence of FDR maps and how they can be beneficial to both their clients and themselves.

MAYORS AND ELECTED MUNICIPAL OFFICIALS CONFERENCE (1988)

Provides information on flooding, the FDR program and the potential types of damage that can occur in their community.

THE ROLE OF HYDROLOGISTS AND ENGINEERS IN FLOOD DAMAGE REDUCTION (1988)

Points out how their professional advice can mitigate the effects of flooding by alerting clients of risks inherent in building near waterways and suggesting alternative solutions.

CUTTING OUR FLOOD LOSSES (1978)

An illustrated brochure setting out the dangers of unwise development in flood plains and describing the national Flood Damage Reduction Program which is designed to identify flood-prone areas and discourage development susceptible to damage by flood waters. The brochure includes a discussion on floods and the rationale for the Program, a concise account of how the Program works, and a series of pertinent questions and answers. Also included is part of a typical flood riak map. (E, F) Available from (1).

FEDERAL-PROVINCIAL PUBLICATIONS

NEWFOUNDLAND

BROCHIRES

FLOOD DAMAGE REDUCTION PROGRAM (1983, Revised 1988)

An illustrated brochure providing facts and information on the Flood Damage Reduction Program in Newfoundland. (E) Available from (11, 13).

FLOOD RISK MAPS

STEPHENVILLE (1984)

A map (scale 1:10,000) delineating the designated flood risk areas in the Stephenville area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

STEADY BROOK (1985)

A map (scale 1:10,000) delineating the designated flood risk areas in the Steady Brook area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

PLACENTIA AREA (1986, Revised 1989)

A map (scale 1:3,850) delineating the designated flood risk areas in the Placentia area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

BADGER AREA (1986)

A map (scale 1:3,580) delineating the designated flood risk areas in the Badger area on the Exploits River. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

RUSHY POND AREA (1986)

A map (scale 1:7,690) delineating the designated flood risk areas in the Rushy Pond area on the Exploits River. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

RUSHOON (1987)

A map (scale 1:2,500) delineating the designated flood risk areas in the Rushoon area on the Rushoon River. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

DEER LAKE (1988)

A map (scale 1:10,000) delineating the designated flood risk areas in the Deer Lake area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

WATERFORD (1989)

A map (scale 1:10,000) delineating the designated flood risk areas along the Waterford River in the cities of St. John's and Mount Pearl. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

PARSON'S POND (1989)

A map (scale 1:5,000) delineating the designated flood risk areas in the community of Parson's Pond. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

STEPHENVILLE CROSSING/BLACK DUCK SIDING (1989)

A map (scale 1:17,500) delineating the designated flood risk areas in these communities. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (11, 13).

NOVA SCOTIA

BROCHURES

NOVA SCOTIA FLOOD DAMAGE REDUCTION PROGRAM (1981)

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in Nova Scotia. (E) Available from (7, 13).

FLOODING IN NOVA SCOTIA, AN OVERVIEW: 1759 - 1986 (1989)

An illustrated sheet (8 p.) providing facts on flooding in Nova Scotia and some analyses of historical flooding information through time. (E) Available from (7, 13).

FLOOD RISK MAPS

EAST RIVER OF PICTOU (1984)

A map in two segments (approximate scales 1: 5,769; 1:9,677) delineating the designated flood risk areas along the main stem of the East River of Pictou from New Glasgow to Eureka. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (7, 13).

SACKVILLE RIVER (1984)

A map in three segments (approximate scales 1:16,666; 1:5,882; 1:5,769) delineating the designated flood risk areas along the main stem of the Sackville river from Bedford Basin to Webber and McCabe Lakes. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (7, 13).

ANTIGONISH AREA (1984)

A map (scale 1:6,666) delineating the designated flood risk areas in and around the Town of Antigonish. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (7, 13).

LITTLE SACKVILLE RIVER (1987)

A map (scale 1:6,000) delineating the designated flood risk areas in the Lower Sackville area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (7, 13).

TRURO AND AREA (1988)

A map (scale 1:15,000) delineating the designated flood risk areas along the Salmon and North rivers in the Truro area. An illustrated text with facts on flooding and flood damage reduction appears on the map sheet. (E) Available from (7, 13).

NEW BRUNSWICK

BROCHURES

FLOOD DAMAGE IN FREDERICTON (1974) PILOT PROJECT

An illustrated brochure providing a general description of the flood plain, outlines solutions to problems of flood damage; discusses emergency measures and describes flood evacuation procedures. Specific problems of flooding in Fredericton are discussed and a map appears on the reverse showing the extent of the 1973 open water flood of record. (E, F) Available from (13).

FLOODING IN NEW BRUNSWICK, AN OVERVIEW: 1696-1984 (1985)

An illustrated booklet (13 p.) providing facts on flooding in New Brunswick and some analyses of historical flooding information through time. (B) Available from (5, 13).

FLOOD DAMAGE REDUCTION IN NEW BRUNSWICK (1986)

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in New Brunswick. (B) Available from (5, 13).

FLOOD FORECASTING IN NEW BRUNSWICK (1987)

An illustrated brochure providing facts on flooding and information on the application of flood forecasting in New Brunswick. (B) Available from (5, 13).

THE SAINT JOHN RIVER FORECAST CENTRE (1988)

An illustrated brochure providing facts on flood forecasting and the operational aspects of the Centre in Fredericton. (B) Available from (5, 13).

THE KENNEBECASIS RIVER FLASH FLOOD FORECASTING AND WARNING SYSTEM (1988)

An illustrated brochure providing facts on flooding in the Kennebecasis River valley and the system established to provide forecasts and warnings for the area. (B) Available from (5, 13).

FLOODPROOFING: PROTECT YOUR HOME AGAINST FLOODING (1989)

An illustrated booklet (17 p.) providing facts on flooding, selected methods of floodproofing, and how one night proceed to floodproof their home. The booklet also contains some references and information on the flood damage reduction program in New Brunswick. (B) Available from (5, 13).

FLOOD RISK MAPS

FLOOD HAZARD MAP, FREDERICTON, NEW BRUNSWICK (1975) PILOT PROJECT

Two maps sheets (scale 1:12,500) in separate brochures (northwest and southeast) showing areas subject to flooding and providing technical information on flood problems in the Fredericton area.
(B)

FREDERICTON (1980)

A map (scale 1:10,000) delineating the flood risk in Fredericton. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E,F) Available from (5, 13).

PERTH-ANDOVER (1980)

A map (scale 1:5,000) delineating the designated flood risk area in the Perth-Andover area. An illustrated text with facts on flooding and flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13).

OROMOCTO-LOWER JEMSEG (1981)

A map (scale 1:50,000) delineating the designated flood risk areas in the Oromocto-Lower Jemseg area. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13).

LOWER FREDERICTON-LINCOLN (1982)

A map (scale 1:10,000) delineating the designated flood risk areas in the Lower Fredericton to Lincoln area. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13).

SUSSEX AREA (1982)

A map (scale 1:25,000) delineating the designated flood risk areas in the Sussex area. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13).

KESWICK RIVER AREA (1983)

A map scale (1:25,000) delineating the designated flood risk areas in the Keswick River area. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13)

NORTON AREA (1985)

A map (scale 1:25,000) delineating both the final and interim-designated flood risk areas bordering the Kennebecasis River and its tributaries from below Norton to Apohaqui. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse side of the map. (E, F) Available from (5, 13)

WALKER BROOK AREA (1986)

A map (scale 1:5,000) delineating the interim-designated flood risk areas bordering Walker Brook in Campbellton and Atholville. An illustrated text with facts on flooding and information on flood damage reduction measures appears on the reverse of the map. (E, F) Available from (5, 13)

FLOOD PRONE AREAS OF NEW BRUNSWICK (1989)

A generalized map (scale 1:638,000) of New Brunswick illustrating areas prone to flooding and those designated or studied under the Canada/New Brunswick Flood Damage Reduction Program. Illustrated text with facts on flooding and information on the Program appears on the reverse side of the map. (B) Available from (5, 13)

ICE JAM FLOODING (1976 AND 1987), PERTH-ANDOVER (1989)

A map (scale 1:5,000) of the Perth-Andover area which delineates the aerial extent of 1976 and 1987 ice jam floods in this community. Illustrated text with facts on these flood also appears on the map. (B) Available from (5, 13)

QUEBEC

BROCHURES

MONTREAL REGION - FLOOD DAMAGE REDUCTION PROGRAM (1978)

An illustrated brochure describing the Flood Damage Reduction Program as applied in the Montreal region. Contains an index and information on the series of twenty-two Montreal region flood risk maps. (B) OUT OF PRINT.

MONTREAL REGION - CORRECTIONS TO THE BOUNDARIES OF THE FLOOD ZONE (1983)

An illustrated brochure describing the June 1983 corrections to the boundaries of the flood zone on the lower reach of the Rivière des Prairies and Rivière des Mille Iles. Contains an index and information on the series of twenty-two Montreal region flood risk maps with particular emphasis on the three corrected maps. (E, F) Available from (6).

FLOOD DAMAGE IN THE BEAUCE (1979)

An illustrated brochure providing facts on flooding and information on flood damage reduction measures in the Chaudière River Basin. (F) Available from (6).

FLOODING IN THE GATINEAU-OTTAWA REGION (1979)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in areas along the Gatineau and Ottawa Rivers. (E, F) Available from (6).

FLOODING ALONG THE UPPER RICHELIEU AND MISSISQUOI BAY (1980)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in the Upper Richelieu-Missisquoi Bay areas. (E, F) Available from (6)

FLOOD DAMAGE ON THE DU GOUFFRE RIVER (1980)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in the du Gouffre River area. (F) Available from (6).

FLOODING IN THE LOWER RICHELIEU REGION (1981, REVISED 1988)

An illustrated brochure providing facts on flooding and information on the Flood Damage Reduction program on the Lower Richelieu River. (E, F) Available from (6).

FLOODING ALONG THE LOWER ASSOMPTION RIVER (1982)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages along the lower Assomption River. (F) Available from (6).

FLOODING IN THE MIDDLE REACHES OF THE RIVIERE SAINT-FRANÇOIS (1982)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages along the Rivière Saint-François between Richmond and Lennoxville. (E, F) Available from (6).

FLOODING ON THE RIVIÈRE YAMASKA (1983)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages along the Rivière Yamaska between Chenal du Moine and Saint-Césaire. (E, F) Available from (6).

FLOODING ON THE RIVIÈRE BECANCOUR (1984)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages along the Rivière Bécancour (1) at the mouth of the river at Bécancour and (2) in the municipalities surrounding Lac William. (F) Available from (6).

FLOODING IN THE RIVIÈRE NICOLET BASIN (1984)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages along the Rivière Nicolet and Nicolet, Sainte-Clothilde-de-Horton, and Victoriaville. (F) Available from (6).

FLOODING ON THE FLEUVE SAINT-LAURENT AT TROIS-RIVIÈRES-OUEST (1984)

An illustrated text providing facts on flooding and information on measures to reduce flood damages on the St. Lawrence River at Trois-Rivières-Ouest. (B) Available (6).

FLOOD RISK MAPS

MONTREAL REGION (1978)

A series of twenty-two maps (scale 1:10,000) delineating designated flood risk areas in the Montreal region. An index to these maps is contained in the brochure listed above. (B) Maps are available from (6).

MONTREAL REGION REVISED MAPS (1983)

A series of three maps (scale 1:10,000) delineating the flood risk areas on the lower reach of the Rivière des Prairies and Rivières des Mille Iles. These maps replace three of the twenty-two maps in the original series. (B) Available from (6).

CHAUDIÈRE RIVER (1979)

A series of eight maps (scale 1:10,000) delineating designated flood risk areas in the Chaudière River Basin. Available from (6).

GATINEAU-OTTAWA REGION (1979)

A series of fifteen maps (scale 1:10,000) delineating designated flood risk areas in the Gatineau and Ottawa River basins. (B) Available from (6).

UPPER RICHELIEU/MISSISQUOI BAY (1980)

A series of eleven maps (scale 1:10,000) delineating designated flood risk areas in the Upper Richelieu/Missisquoi Bay region. (B) Available from (6).

DU GOUFFRE RIVER (1980)

Two maps (scale 1:10,000) delineating designated flood risk areas along the du Gouffre River. (B) Available from (6).

LOWER RICHELIEU RIVER (1981, revised 1988)

A series of 58 maps (scale 1:2,000) delineating designated flood risk areas along the Lower Richelieu River. (B) Available from (6).

ASSOMPTION RIVER (1982)

A series of four maps (scale 1:10,000) delineating designated flood risk areas along the lower Assomption River. (B) Available from (6).

RIVIÈRE SAINT-FRANÇOIS BASIN (1982)

A series of six maps (scale 1:10,000) delineating the interim-designated flood risk areas in the Rivière Saint-François basin. (B) Available from (6).

RIVIÈRE YAMASKA (1983)

A series of twelve maps (scale 1:10,000) delineating designated flood risk areas on the Rivière Yamaska from its mouth to Saint-Césaire. (B) Available from (6).

RIVIÈRE BECANCOUR (1984)

Two maps (scale 1:10,000) delineating designated flood risk areas along the Rivière Bécancour. (B) Available from (6).

RIVIÈRE NICOLET BASIN (1984)

A series of three maps (scale 1:10,000) delineating designated flood risk areas in the Rivière Nicolet basin at Nicolet, Sainte-Clothilde-de-Horton, and Victoriaville. (B) Available from (6).

ST. LAWRENCE RIVER AT TROIS-RIVIÈRES-OUEST (1984)

A series of five maps (scale 1:2,000) delineating the interim-designated flood risk areas on the St. Lawrence River at Trois-Rivières-Ouest. (B) Available from (6).

ONTARIO

BROCHURES

A NEW APPROACH TO AN OLD PROBLEM (1986)

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in Ontario. (B) Available from (8).

CATALOGUE OF FLOOD PLAIN MAPPING IN THE PROVINCE OF ONTARIO, (REVISED JANUARY 1988)

A catalogue summarizing flood plain mapping in Ontario: Details provided are: Conservation Authority/municipality; watercourse; date and length of mapping; whether mapping was conducted under the Canada-Ontario FDR Program; comments; municipality where the watercourse is located. (E) Available from (10).

FLOOD RISK MAPS

OSHAWA AREA, ONTARIO (1976) PILOT PROJECT

A series of 4 maps (scale 1:10,000) covering a total of 118.7 river miles of flood plain. The area covered includes the City of Oshawa, Towns of Whitby and Newcastle; Regional Municipality of Durham. Areas include Oshawa Ck., Corbett Ck., Goodman Ck., Hamony Ck. and Farewell Ck. - An accompanying brochure provides technical and general information on flooding in the area. (E) Available from (8).

METROPOLITAN TORONTO AND REGION (1981)

A series of 8 maps (scale 1:25,000) delineating the designated flood risk areas within Metropolitan Toronto, Regional Municipalities of Durham and York. Areas include Duffin Ck., Etobicoke Ck., Highland Ck., Mimico Ck., Petticoat Ck., Humber R. and Rouge R. (E) Available from (8).

TOWN OF WHITE RIVER (1982)

A map (scale 1:4,800) delineating the designated flood risk areas in the Town of White River. (E) Available from (8).

STURGEON RIVER/LAKE NIPISSING/FRENCH RIVER WATERSHED (1982)

A series of 5 maps (scale 1:20,000) delineating the designated flood risk areas within the City of North Bay; Town of Sturgeon Falls; Townships of Caldwell, Costy, Mason, Martland, Nipissing, North Himsworth, Springer, Bigwood, Commanda, Delamare, Dunnet, MacPhearson, Mowat. (E) Available from (8).

KAMINISTIQUIA RIVER (1982)

A map (scale 1:25,000) delineating the designated flood risk areas along the Kaministiquia River from Rosslyn Village to Lake Superior. (E) Available from (8).

ATIKOKAN RIVER (1986)

A map (scale 1:10,000) delineating the designated flood risk areas within the Township of Atikokan. (B) Available from (8).

NIPIGON TOWNSHIP (1986)

A map (scale 1:7,920) delineating the designated flood risk areas within Nipigon Township. (B) Available from (8).

LOWER TRENT REGION (1986)

A series of 8 maps (scale 1:25,000) delineating the designated flood risk areas within the City of Trenton; Town of Campbellford; Townships of Brighton, Haldimand, Seymour and Sidney; Villages of Brighton, Colborne, Sterling, Warkworth, Frankfort and Hastings. Areas include Trent R., Colborne Ck., Mill Ck., Trout Ck., Barnham House Ck., Butler Ck., Glen Miller Ck., Killoran Ck.), Mayhew Ck., Rawdon Ck., and Shelter Valley Ck. (E) Available from (8).

VILLAGE OF LAKEFIELD (1986)

A map (scale 1:25,000) delineating the designated flood risk areas along portions of Otonabee River and Ray's Creek. (E) Available from (8).

NORTH MONAGHAN TOWNSHIP (1986)

Two maps (scale 1:20,000, 1:25,000) delineating the designated flood risk areas within portions of Cavanville Ck., Jackson Ck., and Otonobee River. (E) Available from (8).

HANLON'S CREEK (1986)

A map (scale 1:10,000) delineating the designated flood risk areas within the City of Guelph and Puslinch Township. (E) Available from (8).

MILL (GALT) CREEK AND IRISH CREEK (1986)

A map (scale 1:25,000) delineating the designated flood risk areas in the City of Cambridge; North Dumfries; and Puslinch Township. (E) Available from (8).

NICKEL DISTRICT CONSERVATION AUTHORITY (1986)

A series of 33 maps (scale 1:20,000) delineating the designated flood risk areas in the City of Sudbury; Towns of Onaping Falls and Walden; Townships of Cleland, Wanup and Nickel Centre. Areas include Junction Ck., Nolin Ck., Coniston Ck., Whitefish R., Whitson R., Vermilion Lake and Wahnapitei River. (E) Available from (8).

· LAKE HURON (1986)

Two maps (scale 1:25,000) delineating the designated flood risk areas in the Townships of Colborne, Goderich and Ashfield - Maitland Valley Conservation Authority. (E) Available from (8).

GOULAIS RIVER (1987)

A map (scale 1:20,000) delineating the designated flood risk areas within the Townships of Fenwick, Hodgins and Van Koughnet. (B) Available from (8).

THESSALON (1987)

A map (scale 1:10,000) delineating the designated flood risk areas within portions of Thessalon River Region. (B) Available from (8).

ESPANOLA (1987)

A map (scale 1:10,000) delineating the designated flood risk areas within portions of Spanish River Region. (B) Available from (8).

LITTLE CATARAQUI CREEK (1987)

A map (scale 1:20,000) delineating the designated flood risk areas within the City of Kingston. (E) Available from (8).

BELL CREEK (1987)

A map (scale 1:10,000) delineating the designated flood risk areas within the City of Belleville. (E) Available from (8).

MOIRA/RIVER (1987, 1989)

A series of 4 maps (scale 1:10,000, 1:25,000) delineating the designated flood risk areas within the towns of Canifton, Corbyville, Chislholm Mills, Plainfield, Actinolite, Tweed and Belleville. (E) Available from (8).

DRESDEN (1987)

A map (scale 1:4,000) delineating the designated flood risk areas within parts of the Sydenham River Region. (E) Available from (8).

NITH RIVER (1987)

A map (scale 1:25,000) delineating the designated flood risk areas within the towns of New Hamburg, Haysville, Plattsville, Perrys Corners, Greenfield and Ayr. (E) Available from (8).

CONESTOGA RIVER (1987)

A map (scale 1:25,000) delineating the designated flood risk areas within the towns of Drayton, Riverbank and Arthur. (E) Available from (8).

TOWNSHIP OF HORNEPAYNE (1988)

A map (scale 1:10,000) delineating the designated flood risk areas within portions of the Little Jackfish River and Hornepayne Creek Region. (B) Available from (8).

PETAWAWA TOWNSHIP (1988)

A map (scale 1:20,000) delineating the designated flood risk areas along a portion of the Ottawa River. (B) Available from (8).

MCNAB TOWNSHIP (1988)

A map (scale 1:20,000) delineating the designated flood risk areas along a portion of the Ottawa River. (B) Available from (8).

VILLAGE OF PORT STANLEY (1988)

A map (scale 1:5,000) delineating the designated flood risk areas along a portion of Kettle Creek. (B) Available from (8).

RAISIN REGION (1989)

A series of 10 maps (scale 1:10,000, 1:25,000) delineating the designated flood risk areas within the City of Cornwall; Town of Alexandria; Townships of Charlottenburgh, Cornwall, Lancaster, Osnabruck, Kenyon, Roxborough and Lodchiel. Areas include Raisin R. West, Raisin R. East, North Raisin R., South Raisin R., Grays Ck., Rivière Beaudette, Hoople Ck., Delisle R., Garry R., Cornwall, St. Lawrence R. West, and St. Lawrence R. East. (B) Available from (8).

GANANOQUE RIVER (1989)

A series of 3 maps (scale 1:10,000, 1:25,000) delineating the designated flood risk areas along portions of the Gananoque River, Wiltse Ck., Singleton, Reshorse and Charleston Lakes, and Graham and Temperence Lakes. (B) Available from (8).

SOUTH LAKE SIMCOE REGION (1989)

A series of 6 maps (scale 1:10,000, 1:25,000) delineating the designated flood risk areas within parts of Pefferlaw and Uxbridge Brooks-Upper and Lower Parts; Beaverton R., Vrooman Ck., Zephyr Ck. and Whites Ck. (E) Available from (8).

TOWNSHIP OF IGNACE (1989)

A map (scale 1:20,000) delineating the designated flood risk areas along portions of Agimak Creek. (B) Available from (8).

TOWNSHIP OF SCHREIBER (1989)

A map (scale 1:20,000) delineating the designated flood risk areas along portions of Cook Lake Creek. (B) Available from (8).

TOWN OF DRYDEN (1989)

A map (scale 1:20,000) delineating the designated flood risk areas along portions of Wabigoon River. (E) Available from (8).

VILLAGE OF IRON BRIDGE (1989)

A map (scale 1:20,000) delineating the designated flood risk areas along portions of Mississagi River. (B) Available from (8).

OTONABEE RIVER (1989)

A map (scale 1:20,000) delineating the designated flood risk areas within the South Monoghan and Otonabee Townships. (B) Available from (8).

INDIAN RIVER (1989)

A map (scale 1:20,000) delineating the designated flood risk areas within the Warsaw and Dummer Townships. (B) Available from (8).

MANITOBA

BROCHURES

FLOOD DAMAGE IN CARMAN, MANITOBA - PILOT PROJECT

A brochure outlining various methods of reducing floods damages and the difficulties of applying these methods in Carman, a town in which flooding has always been a problem. An accompanying map indicates the flood risk area in Carman. (E, F) OUT OF PRINT.

CANADA-MANITOBA FLOOD DAMAGE REDUCTION PROGRAM - A SUMMARY

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in Manitoba. Includes answers to commonly asked questions. (E, F) Available from (2, 16).

CAN YOU AFFORD A FLOOD? HOW TO REDUCE FLOOD DAMAGES IN MELITA (1979)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Melita. (E) Available from (2, 16).

CAN YOU AFFORD A FLOOD? HOW TO REDUCE FLOOD DAMAGES IN WAWANESA (1979)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in Wawanesa. (E) Available from (2, 16).

REDUCING FLOOD DAMAGES IN WINNIPEG (1980)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in Winnipeg. (E, F) Available from (2, 16).

CAN YOU AFFORD A FLOOD? HOW TO REDUCE FLOOD DAMAGES IN SOURIS (1980)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in Souris. (E) Available from (2, 16).

CAN YOU AFFORD A FLOOD? HOW TO REDUCE FLOOD DAMAGES IN ELIE (1980)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in Elie. (E) Available from (2, 16).

REDUCING FLOOD DAMAGE IN BRANDON (1982)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Brandon. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION ALONG THE LA SALLE RIVER (1982)

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in the communities of Starbuck, Sanford and La Salle on the La Salle River. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN SWAN RIVER (1983)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Swan River. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN DAUPHIN (1984)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Dauphin. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN CARMAN (1984)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Carman. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN LORETTE (1984)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Lorette. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN ARBORG (1987)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Arborg. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN FISHER BRANCH (1987)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Fisher Branch. (E) Available from (2, 16).

FLOOD DAMAGE REDUCTION IN RIVERTON (1987)

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Riverton. (E) Available from (2, 16).

FLOOD RISK MAPS

FLOOD RISK MAP, CARMAN, MANITOBA - PILOT PROJECT

Map (scale 1:5,000) and accompanying technical brochure describe the flood problem in Carman, discuss flood magnitudes and frequencies and explain the National Flood Damage Reduction Program.
(B) OUT OF PRINT.

MELITA (1979)

A map (scale 1:2,000) delineating interim-designated flood risk areas in Melita. (B) Available from (2, 16).

WAWANESA (1979)

A map (scale 1:2,000) delineating the interim-designated flood risk area in Wawanesa. (B) Available from (2, 16).

WINNIPEG (1980)

A map (scale 1:30,000) delineating interim-designated flood risk areas in Winnipeg. (B) Available from (2, 16).

SOURIS (1980)

A map (scale 1:5,000) delineating designated flood risk areas in Souris. (B) Available from (2, 16).

ELIE (1980)

A map (scale 1:5,000) delineating designated flood risk areas in Elie. (B) Available from (2, 16).

BRANDON (1982)

A map (scale 1:25,000) delineating designated flood risk areas in Brandon. (B) Available from (2, 16).

STARBUCK/SANFORD/LA SALLE (1982)

Three maps, (Starbuck, Sanford and La Salle - scale of 1:10,000) delineating the flood risk areas in each village. (B) Available from (2, 16).

SWAN RIVER (1983)

A map (scale 1:5,000) delineating flood risk areas in Swan River. (B) Available from (2,16).

DAUPHIN (1984)

A map (scale 1:10,000) delineating flood risk areas in Dauphin. (B) Available from (2, 16).

CARMAN (1984)

A map (scale 1:5,000) delineating flood risk areas in Carman. (B) Available from (2, 16).

LORETTE (1984)

A map (scale 1:5,000) delineating flood risk areas in Lorette. (B) Available from (2, 16).

ARBORG (1987)

A map (scale 1:5,000) delineating flood risk areas in Arborg. (B) Available form (2, 16).

FISHER BRANCH (1987)

A map (scale 1:5,000) delineating flood risk areas in Fisher Branch. (B) Available from (2, 16).

RIVERTON (1987)

A map (scale 1:5,000) delineating flood risk areas in Riverton. (B) Available from (2, 16).

SASKATCHEWAN

BROCHURES

CANADA-SASKATCHEWAN FLOOD DAMAGE REDUCTION PROGRAM (1989)

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in Saskatchewan. Includes answers to commonly asked questions. (E, F) Available from (2, 14).

FLOOD DAMAGE REDUCTION PROGRAM FOR LOWER SOURIS VALLEY

An illustrated brochure providing facts on flooding and information on measures to reduce flood damages in the communities of Oxbow, Roche Percee and Estevan. Also included are maps delineating the flood hazard areas designated on an interim basis for each of these communities. (E) Available from (2, 14).

FLOOD DAMAGE REDUCTION PROGRAM FOR MOOSE JAW

An illustrated brochure providing facts on floods and information on measures to reduce flood damages in Moose Jaw. (E) Available from (2, 14).

FLOOD RISK MAPS

FLOODING IN MOOSE JAW, SASKATCHEWAN, 1969 AND 1974 PILOT PROJECT

A map folder providing information on flooding in Moose Jaw to assist governments, the private sector, and residents of the city in reaching decisions on development of the flood plain. Essential features are a flood map and a description of general aspects of flooding as well as information on aspects specific to Moose Jaw. (E, F) OUT OF PRINT.

MOOSE JAW (1981)

A map (scale 1:10,000) delineating designated flood hazard areas in Moose Jaw. (B) Available from (2, 14).

MELFORT (1988)

A map (scale 1:50,000) delineating designated flood hazard areas in Melfort. (B) Available from (2, 14).

RADVILLE (1988)

A map (scale 1:50,000) delineating designated flood hazard areas in Radville. (B) Available from (2, 15).

TISDALE (1989)

A map (scale 1:10,000) delineating designated flood hazard areas in Tisdale. (B) Available from (2, 14).

LA RONGE / AIR RONGE (1979)

A map (scale 1:5,000) delineating designated flood hazard areas in La Ronge/Air Ronge. (B) Available from (2, 14).

ALBERTA

BROCHURES

CANADA-ALBERTA FLOOD DAMAGE REDUCTION PROGRAM (1989)

An illustrated brochure providing facts on flooding and information on the application of the Flood Damage Reduction Program in Alberta. (E) Available from (2, 20).

BRITISH COLUMBIA

BROCHURES

FLOODPLAIN MAPPING PROGRAM (1989)

An overview of the Canada-British Columbia Floodplain Mapping Program. Topics include the rationale for the program and an explanation of floodplain maps, floodplains, floodplain designations, and floodproofing. (E) Available from (17, 18).

NORTHWEST TERRITORIES

BROCHURES

CANADA-N.W.T. FLOOD DAMAGE REDUCTION PROGRAM

An illustrated information circular providing facts on flooding and information on the application of the Flood Damage Reduction Program in the Northwest Territories. Includes answers to commonly asked questions (E) Available from (9, 12, 19).

THE CANADA-NORTHWEST TERRITORIES FLOOD DAMAGE REDUCTION PROGRAM

An illustrated brochure providing facts and information on the Flood Damage Reduction Program in the Northwest Territories. (E) Available from (9, 12, 19).

FLOOD RISK MAPS

HAY RIVER (1984)

A map (scale 1:10,000) delineating designated flood risk area's in Hay River. (B) Available from (9, 12, 19).

FORT SIMPSON (1985)

A map (scale 1:5,000) delineating designated flood risk areas in Fort Simpson. (B) Available from (9, 12, 19).

AKLAVIK (1985)

A map (scale 1:5,000) delineating designated flood risk areas in Aklavik. (B) Available from (9, 12, 19).

FORT McPHERSON (1985)

A map (scale 1:5,000) delineating designated flood risk areas in Fort McPherson. (B) Available from (9, 12, 19).

FORT GOOD HOPE (1985)

A map (scale 1:5,000) delineating designated flood risk areas in Fort Good Hope. (B) Available from (9, 12, 19).

FORT LIARD/NAHANNI BUTTE (1987)

Two maps, one for each of Fort Liard and Nahanni Butte, (scale of 1:5,000) delineating flood risk areas in each hamlet. The two maps are depicted on one handout sheet. (B) Available from (9, 12, 19).

FORT NORMAN (1987)

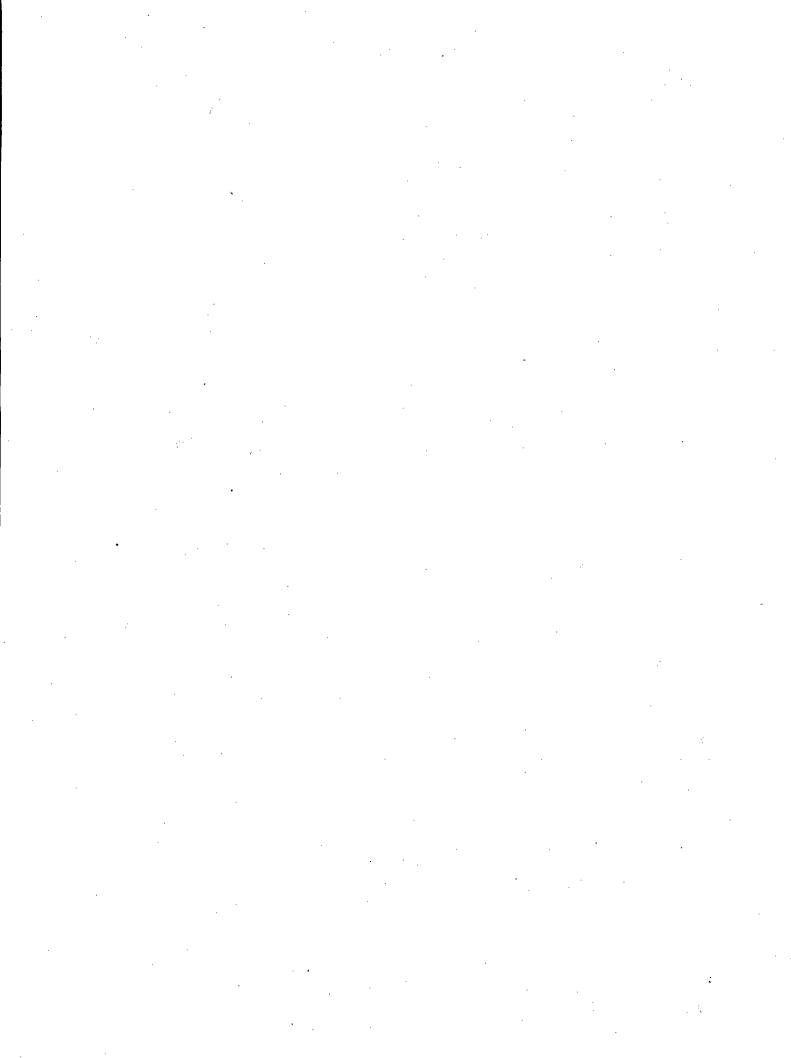
A map (scale 1:5,000) delineating designated flood risk areas in Fort Norman. (B) Available from (9, 12, 19).

TUKTOYAKTUK (1987)

A map (scale 1:5,000) delineating designated flood risk areas in Tuktoyaktuk. (B) Available from (9, 12, 19).

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 Inland Waters Directorate
 Ottawa, Ontario
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- Environment Canada Inland Waters Directorate 1901 Victoria Avenue Regina, Saskatchewan S4P 3R4
- 3. Environment Canada
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 1141 route de l'Eglise
 P.O. Box 10100
 Sainte-Foy, Quebec
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- 4. Canada Map Office
 Department of Energy, Mines and Resources
 615 Booth Street
 Ottawa, Ontario
 K1A 0E9
- New Brunswick Department of the Environment Water Resources Branch
 P.O. Box 6000
 Fredericton, New Brunswick
 E3B 5H1
- 6. Gouvernement du Québec Ministère de l'Energie et des Ressources Service de la Cartographie 1955 boulevard Charest ouest Sainte-Foy (Québec) G1N 4H9
- 7. The Canada-Nova Scotia Flood Damage Reduction Program c/o The Nova Scotia Department of the Environment P.O. Box 2107 Halifax, Nova Scotia B3J 3B7
- 8. Inland Waters Directorate
 Environment Canada
 P.O. Box 5050
 Burlington, Ontario
 L7R 4A6
- 9. Inland Waters Directorate Environment Canada P.O. Box 2970 Yellowknife, N.W.T. X1A 2R2
- 10. Program Co-ordination Canada/Ontario Flood Damage Reduction Program Conservation Authorities and Water Management Branch Ministry of Natural Resources Room 5620, Whitney Block 99 Wellesley Street West Toronto, Ontario M7A 1W3
- 11. Department of Environment Government of Newfoundland and Labrador P.O. Box 4750 St. John's, Newfoundland A1C 5T7

- 12. Government of the Northwest Territories
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- 20. Alberta Environment
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