

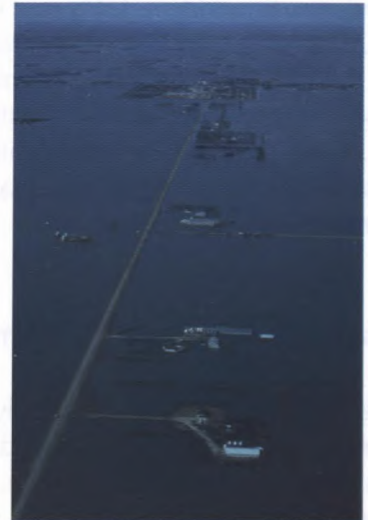
The long-term flooding history of the Red River in southern Manitoba and the geological controls relevant to the flooding are being investigated as part of an effort to upgrade flood protection in this area. This research will provide a basis for assessing risks and will support decision making on appropriate long-term remediation measures and land use.

Geoscientists are also studying the permafrost that underlies more than half of Canada and its impact on Canadian development. As part of this work, models are being developed to quantify the risk to oil and gas infrastructure associated with permafrost degradation and slope movement and to analyze the mechanisms that transport contaminants from industrial waste sites in permafrost.

Partnerships

Each of the federal, provincial, and territorial governments requires capacity in geoscience and geomatics to fulfil its legal mandates. These governments discuss matters of mutual concern and formulate joint action plans related to the geosciences through the National Geological Surveys Committee. An Intergovernmental Geoscience Accord (IGA) was established in 1996 to define the complementary roles and responsibilities of the federal, provincial, and territorial levels of government. The accord defines the principles of cooperation to optimize the use of resources and established mechanisms to maximize collaboration in the area of geoscience. A renewed IGA is expected to be finalized by September 2001. The formalization of this accord confirms the need for collaboration on national and regional priorities. The Canadian Council on Geomatics is the senior federal, provincial, and territorial consultative body for geographic information management. GeoConnections is an example of an initiative where national consultation resulted in governments taking a participatory role in developing a geospatial information system. A GeoConnections National Accord, which is under development, will provide shared responsibility on national geospatial initiatives.

The governments in Canada work closely with the private sector and universities in the areas of geomatics and geoscience. GeoInnovations is a component of the federal government's GeoConnections program that promotes government-private sector partnerships. Geomatics for Informed Decision Making (GEOIDE) is a network aimed at linking all sectors involved in geomatics that was recently launched by Canada's Natural Science and Engineering Research Council's Networks of Centres of Excellence program. It brings together 90 researchers from universities, private sector companies, government agencies, and other organizations, and is expected to facilitate the efficient transfer of



Red River flood, southern Manitoba, 1997. Photo credit: Geological Survey of Canada.

GeoConnections

The Internet is proving to be useful in providing Canadians with the information they need to participate in decision making. Efforts are under way to improve access to earth sciences and other geographic information via the Internet. Learn more at <http://www.geoconnections.org>