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Chackowsky, L. and Lindal, D. 2000: Bedrock Geology Compilation Map Series; in Report of Activities 2000, Manitoba Industry, Trade and Mines, Manitoba Geological Survey, p. 223-224.

**SUMMARY**

The Bedrock Geology Compilation Map Series (BGCMS) was initiated in 1985 to provide uniform 1:250 000 scale geological compilation maps for the entire province, initially focusing on areas of high mineral endowment and/or high mineral potential. Digitization of all existing manually drafted BGCMS maps is almost complete, and map production is now 100% digital, using ArcInfo geographic information system (GIS) technology. There are now 22 BGCMS maps,

covering more than half of the province (Fig. GS-37-1), including the entire Churchill Province, core areas of the Superior Province, and the capitol region. The parts of Manitoba not yet covered by BGCMS include areas of mostly unexposed Phanerozoic bedrock, and parts of the Superior Province with little or no bedrock exposure or supracrustal bedrock (Lenton, 1999).

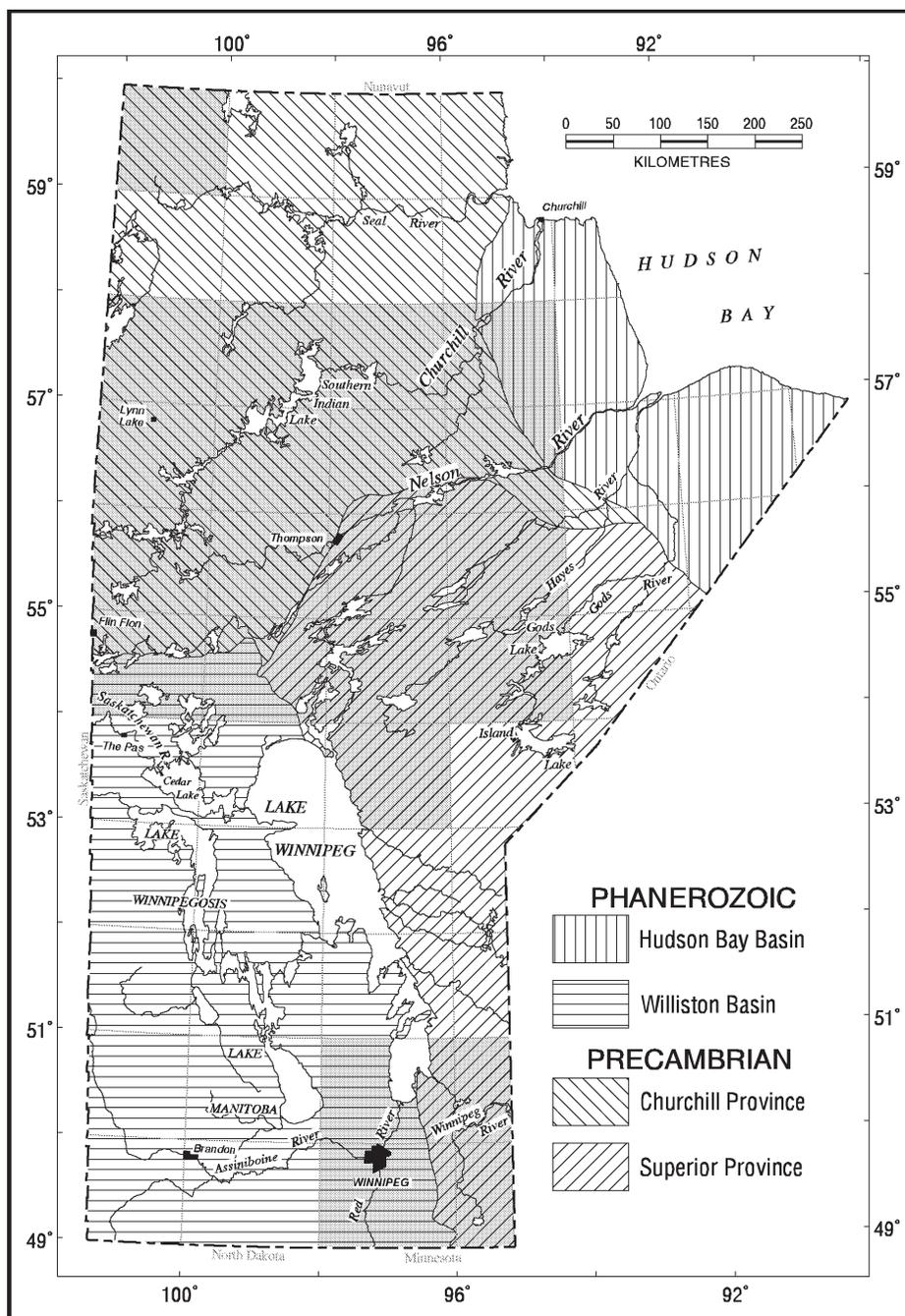
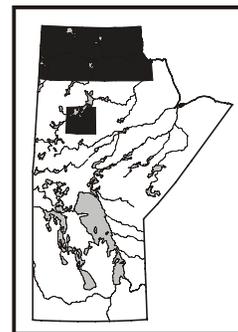


Figure GS-37-1: Areas of Manitoba covered by Bedrock Geology Compilation Map Series (BGCMS) maps.

## INTRODUCTION

This year's work has focused on:

- 1) colour map production for the Cochrane–Seal rivers area (8 sheets), largely based on previously published 1:250 000 compilation maps (Schledewitz, 1986);
- 2) an update of BGCMS map 64B – Uhlman Lake sheet (Manitoba Energy and Mines, 1986), the original version of which is now out of print; and
- 3) development of a new BGCMS legend structure.

## COCHRANE–SEAL RIVERS AREA

This area covers eight 1:250 000 scale NTS map sheets in north-western Manitoba (Fig. GS-37-1): 54L (Churchill), 54M (Caribou River), 64-I (Shetehana Lake), 64J (Tadoules Lake), 64K (Whiskey Jack Lake), 64N (Kasmere Lake), 64O (Munroe Lake) and 64P (Nejanilini Lake). These sheets were first published in 1986 as part of Geological Report GR80-9 (Schledewitz, 1986). These eight BGCMS maps will represent digitization, refinement, conversion to BGCMS GIS format, editing and updating of the information from the GR80-9 maps and report. Newly released geophysical information (Viljoen et al., 1999) has been used for extrapolating dykes and contacts beneath lakes and overburden. Sheet 64N (Kasmere Lake) has been completed and released; the other seven sheets are in preparation, with 64O (Munroe Lake) and 64P (Nejanilini Lake) expected for release by March 31, 2001.

## UHLMAN LAKE SHEET

The Uhlman Lake sheet (NTS 64B) has been updated to incorporate new information gathered during the last decade of field investigations, as well as the newly released geophysical information cited above. Release is expected by March 31, 2001. In the interim, in-house LaserJet™ prints of a scanned image of the out-of-print paper map (Manitoba Energy and Mines, 1986) are available for sale.

## NEW LEGEND STRUCTURE

A new legend structure is now under development and will provide the following advantages over the existing structure:

- 1) There will be a more consistent legend across the entire province.
- 2) The new legend is not based on geological domains, which are often poorly defined.
- 3) There is no duplication of units cut by domain boundaries, resulting in a much simpler legend (the current legend has more than 1000 unit descriptions on 29 map sheets!).
- 4) Unit identifiers incorporate tectonostratigraphic as well as lithological information.
- 5) Unit identifiers are insensitive to text enhancements (e.g. bold face, subscript/superscript), polygon colour and patterning, and geological domain. This facilitates data exchange between various GIS/CADD platforms.
- 6) It will facilitate reclassification and other spatial analyses of lithological units using GIS (e.g. to produce an updated 1:1 000 000 bedrock geology map of Manitoba).

## REFERENCES

- Lenton, P.G. 1999: Geoscience Information Services projects; *in* Report of Activities 1999, Manitoba Industry, Trade and Mines, Geological Services, p. 130–131
- Manitoba Energy and Mines 1986: Uhlman Lake; Manitoba Energy and Mines, Geological Services, Bedrock Geology Compilation Map Series, NTS 64B, scale 1:250 000.
- Schledewitz, D.C.P. 1986: Geology of the Cochrane and Seal rivers area; Manitoba Energy and Mines, Geological Services, 139 p. plus 8 geological maps at 1:250 000 scale and 5 figures at 1:500 000 scale.
- Viljoen, D., Chackowsky, L., Lenton, P. and Broome, H.J. 1999: Geology, magnetic and gravity maps of Manitoba: a digital perspective; Manitoba Industry, Trade and Mines, Open File OF99-12, 1 CD-ROM.