

# A Summary of the Work Completed for the Nova Scotia Component of the 2003 to 2005 Targeted Geoscience Initiative Program

*R. D. Naylor, D. C. Brisco and P. S. Giles*

The Targeted Geoscience Initiative Program (TGI) is a national program designed to assist and promote mineral and energy exploration. The Nova Scotia component of the most recent TGI program (Phase 2) began during the summer of 2003 and work on the program has now been largely completed. Project work focused on bedrock mapping of the area covered by NTS sheets 11E/06 and 11E/07. The project also included mineral deposit research, geological resource evaluation, geophysical modelling, regional geochemistry and compilation of historical mapping data.

All the maps produced by this project were digitally compiled in an ArcView® format. The maps that are available include:

- GSC published and open file maps 1058a, 1215a, 3757, 3535 and 3703;
- twenty-one previously unpublished maps which formed part of the Nova Scotia Department of Mines St. Marys River Basin Project undertaken from 1968 to 1971;
- four previously unpublished 1:50 000 scale maps illustrating the work undertaken as part of a NATMAP project in the St. Marys Basin by Brendan Murphy and Randy Rice (1993-94). These maps were released as Nova Scotia Department of Natural Resources, Mineral Resources Branch Open File Maps 2005-10, 11, 12 and 13;
- new 1:50 000 scale maps of NTS areas 11E/06 and 11E/07 created using new mapping carried out for this project and compiled data from previous workers;
- thirteen new 1:10 000 scale maps detailing the upper Carboniferous strata adjacent to the Cobequid Fault from Londonderry to Kemptown;
- 1:50 000 geophysical maps for the entire project area (aeromagnetic, gravity, VLF-EM);
- recent industry high-resolution airborne magnetic survey of parts of NTS areas 11E/06 and 11E/07; and
- colour/contoured shaded relief map images of the project area created from digital radiometric data acquired from Radiation Geophysics Section of the Geological Survey of Canada.

The mineral occurrence database for the project area has been updated and many of the more significant occurrences were re-visited. The results of the mineral deposit studies and regional geochemistry will be published in the Mineral Resources Branch Report of Activities for 2005.