

DESCRIPTIVE NOTES

INTRODUCTION The central Sturgeon Subprovince of the Superior Province (Figure 1) is a large belt of mafic and felsic magmatic rocks, and is the largest of the central Sturgeon Subprovince.

PREVIOUS WORK Comprehensive mapping of the Sturgeon Lake granitoid belt was conducted by H.T. Towell (1968, 1970) and subsequent work by the Geological Survey of Canada (1970-1980). The geological map of the belt is summarized in this report.

METAVOLCANIC UNITS Towell (1968) subdivided metavolcanic rocks in the Sturgeon Lake area into volcanic cycles, each containing volcanic portions of older mafic (M1) and younger andesitic (M2) volcanic rocks.

METASEDIMENTARY ROCKS Metasedimentary rocks occur in three localities. Relatively quartzitic clastic metasedimentary rocks occur in the north-central part of the map area.

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REFERENCES

Beggs, D.B. 1976. Petrology and geochemistry of Archean volcanic rocks north of Sturgeon Lake, unpublished M.Sc. thesis, University of Toronto.
Bickford, C.E., Johns, W.W., and Davis, D.W. 1991. Wapitong Subprovince, Geological Survey of Canada, Report 231, 100 pp.

STRUCTURE AND METAMORPHISM Tightly folded rocks with a pronounced foliation form two main corridors (Figure 3) shaded and traced on this map.

FOLDS Two corridors of folded strata occur in the map area (Figure 3). Shaded and traced on this map are the two corridors of folded strata.

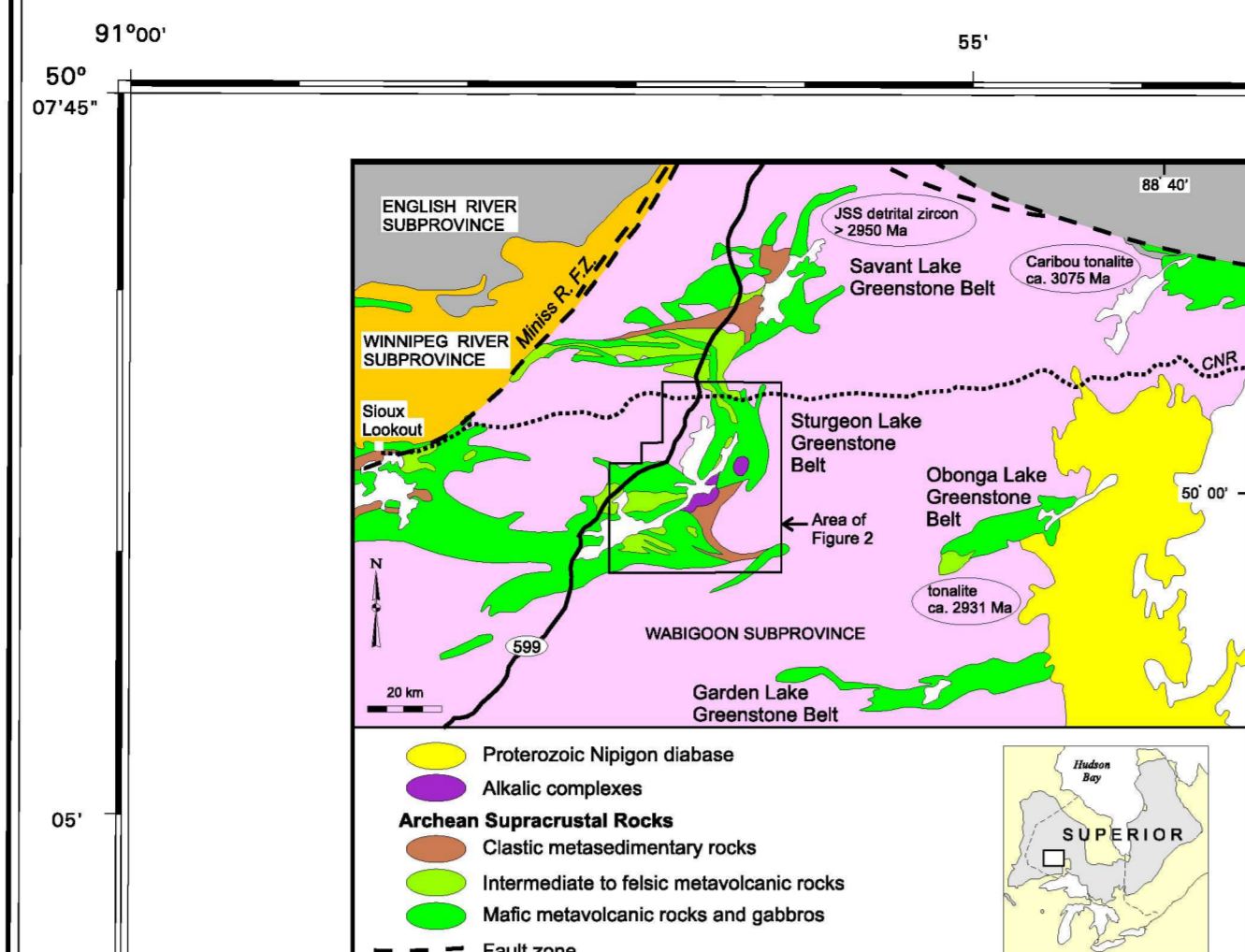


Figure 1. Regional setting of the central Sturgeon Subprovince, Superior Province, showing detailed occurrences of Mesoproterozoic crust.

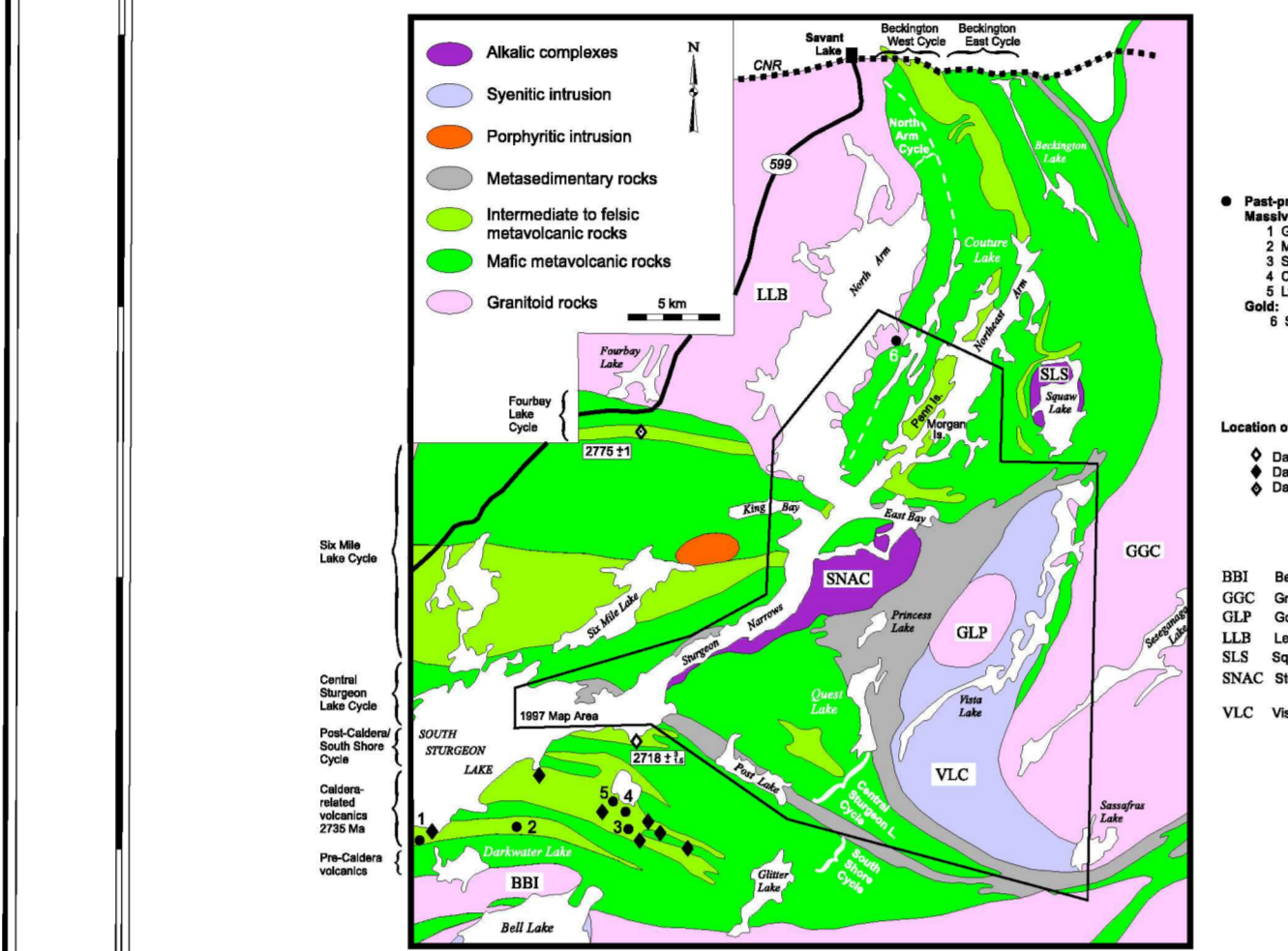
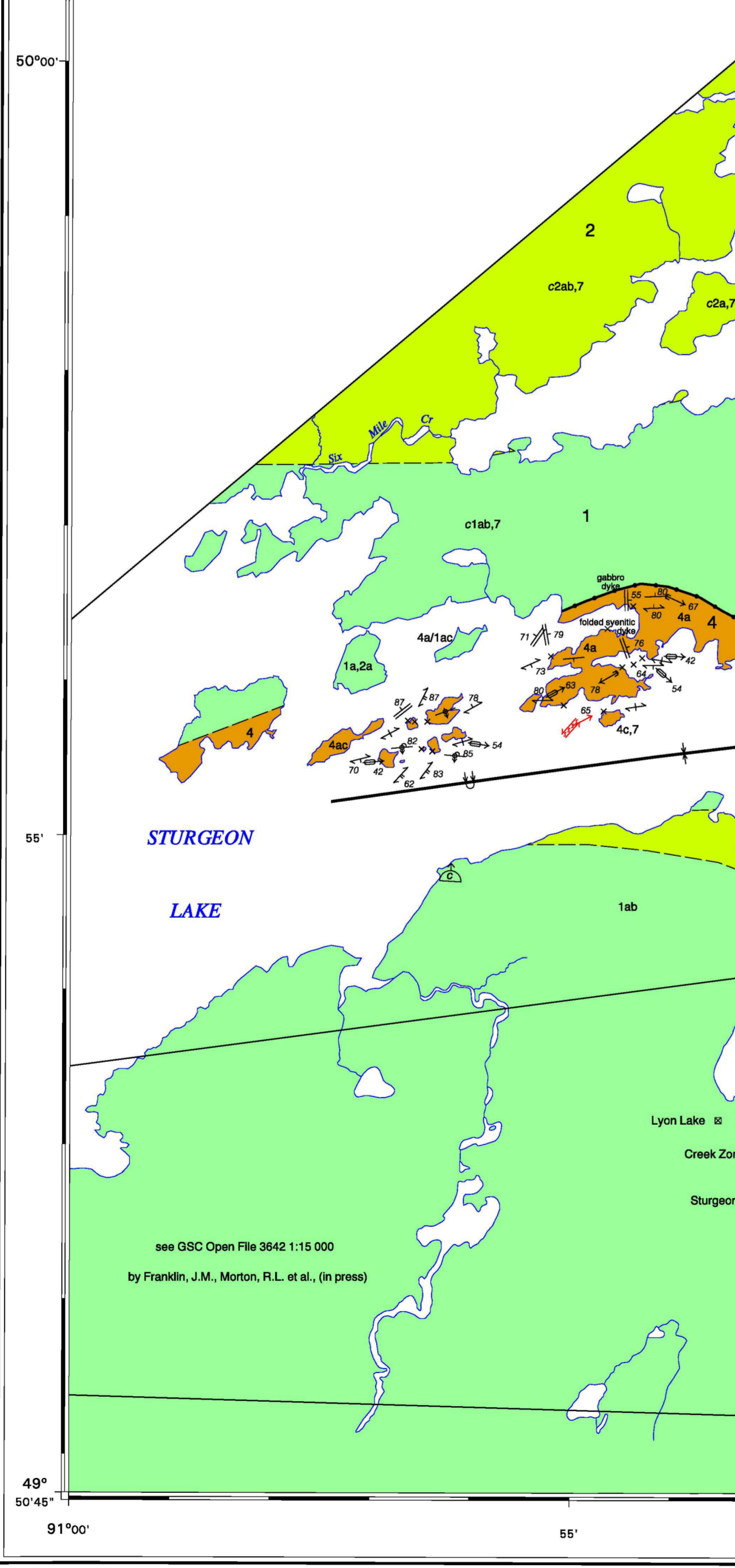


Figure 2. Regional geology of the Sturgeon Lake granitoid belt with volcanic cycle nomenclature adopted from Towell (1968).



Geology by M. Sarmiento-Barnes and J. Szabolcs, with assistance by C. Szabolcs and J.S. Wilton, 1997. Digital map compilation by M. Sarmiento-Barnes, 1997. Co-ordinated by J. Fouché through the auspices of the Western Superior NATMAP Project.

STRUCTURAL GEOLOGY CENTRAL STURGEON LAKE AREA ONTARIO. Scale 1:50 000 - Echelle 1:50 000. Includes a scale bar and projection information.

Any revisions or additional geological information known to the user would be recognized by the Geological Survey of Canada. Digital compilation of previous geological mapping provided by the Ontario Geological Survey and the Data Service Section of the Ministry of Natural Resources and Mines, Sudbury, Ontario.

Table with 4 columns: UTM Easting coordinates (26, 27, 28, 29) and UTM Northing coordinates (6191, 6201, 6211).

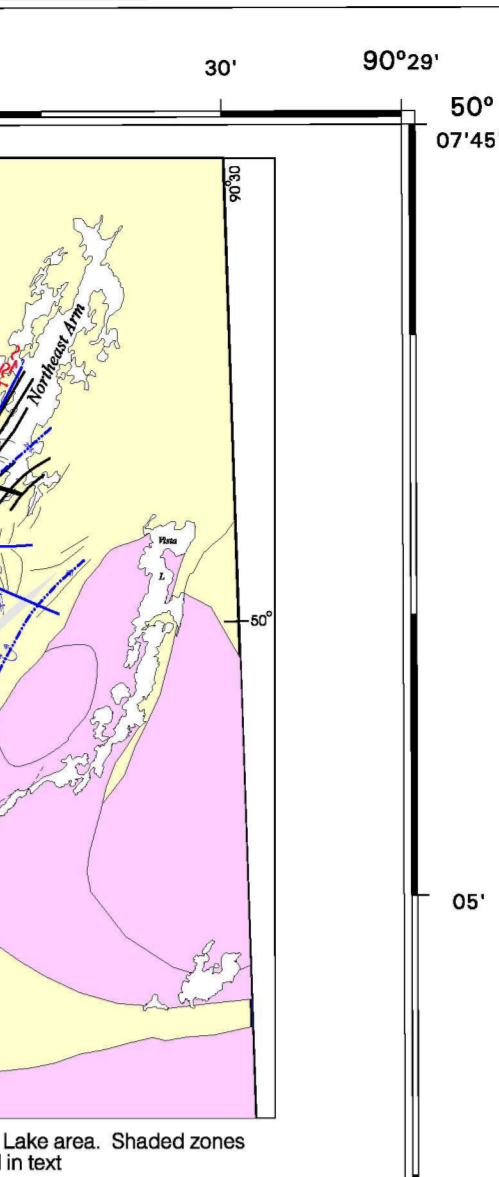


Figure 3. Major structural elements of the central Sturgeon Lake area. Shaded areas correspond to corridors of folded rock, described in text.

LEGEND. Includes Plutonic Rocks (10, 9, 8, 7, 6), Metasedimentary Rocks (5), Metavolcanic Rocks (4, 3, 2, 1), and Structural Features (Small bedrock outcrop, Bedding, etc.). Includes SOURCES OF INFORMATION and a table of mineral abbreviations.