

Mineral Resource Map Atlas - A New Tool for Provincial Resource and Land Use Decisions

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The importance of mineral resources, although understood in general terms, has not been easily defined during decisions on the use of land for the future well being of the people of Nova Scotia. A newly developed map atlas will help guide such decisions in the future. Three series have been developed to date, each comprising a set of four overlapping sheets at a scale of 1:250 000. The first series, *Exploration and Mining Activity*, provides a factual record of mining and exploration activity across the province during the past 25 years. This series draws on data from mineral claim staking, mining permits and leases, past and current mining operations, and direct evidence of exploration and development including drillholes, seismic surveys and mines. The claim-staking data is layered to reflect repeated staking activity during the period 1982-2006, and effectively maps out geologic trends of economic interest, strengthened by the other data sets. A supplementary data set of pre-moratorium uranium staking activity covers the years 1947 to 1982. The record of tin exploration in southwest Nova Scotia (*ca.* 1976-1982) remains to be added.

Trends identified in the first map series dove-tail with known mineral and aggregate deposits delineated in the second and third map series, which are in the process of being vetted by mineral commodity specialists within the Department of Natural Resources. Commodities reflected in the *Mineral Occurrences and Deposits* series include: base and precious metals; industrial minerals; and energy resources including coal, peat and petroleum. The deposit series is the more challenging due to the rich but complex geological heritage of Nova Scotia. Defined deposit areas include metallogenic domains ranging from long known gold districts to more recent targets such as IOCG, and stratigraphically controlled resources of the Windsor and coal-bearing Cumberland groups. The third series, *Aggregate Resources*, reflects potential bedrock and surficial resources.

It is hoped that these maps, based on carefully constrained information, will help to inform the decision making process involved in land use with respect to these important provincial resources. The maps also lay the foundation for future GIS-based information compilation on mineral resources, an area for which opportunities are virtually boundless.

