

OFM ME 2000-4 (11E/10)

11E/10
New Glasgow

Compiled by
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Halifax, Nova Scotia

Scale 1 : 50 000

1000 0 1000 2000

Metres

A total of 98 planimetric (1:50 000 scale) Mineral Resource Land-Use (MRLU) maps combine to form a thematic atlas, which covers the province of Nova Scotia including all near-shore islands and Sable Island. The main purpose in preparing this Atlas is to provide the public with a single geographic compilation of mineral resource and related land-use information at a reasonably detailed scale. A key objective is to create a useful reference for practitioners working in land-use and environmental planning, geotechnical firms and groups involved in community economic development.

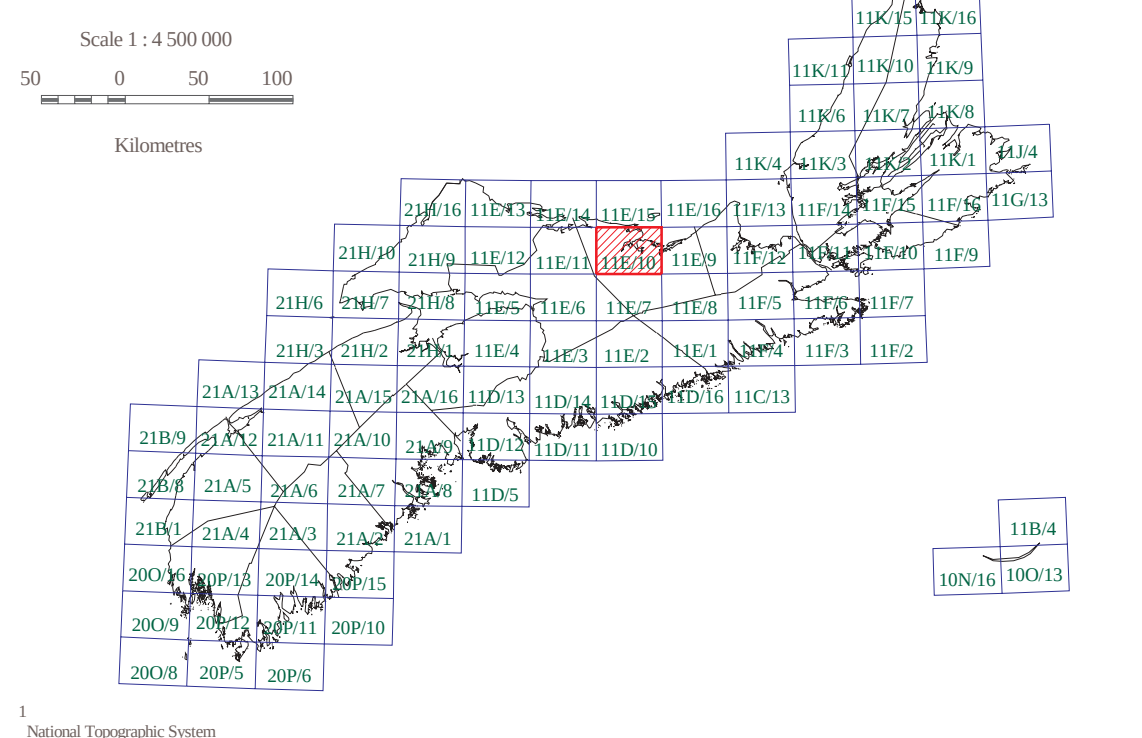
The MRLU maps display the location and distribution of mineral and energy resources and related activities as well as aspects of environmental geology that relate to land-use and environmental planning. Special land-use designations on Crown and some privately-owned land are shown to indicate how Nova Scotia's land base varies regarding the ability of mineral resource interests to access land and hold secure tenure. Please note: Because these maps were compiled from many different data sources with different scales and projections, some of the overlapping thematic data appears "shifted" relative to each other.

Over the course of developing this project, several compilers have contributed to the preparation of these maps, which involved gathering and organizing data from databases managed by the Department as well as other government departments, agencies and non-government organizations. The manual compilers include: David Hopper, Cheryl Dobson, Kathy Gillis, Fred Bonner, Janet Webster, and Mai Nguyen. The digital compilers include: Fred Bonner, Brian Fisher, Beth Wile, Lisa Hills, Angela Murphy and Jeffrey McKinnon. Orders for maps and data layers should be directed to: Nova Scotia Department of Natural Resources, Library, PO Box 698, Halifax, Nova Scotia, B3J 2Y9. Telephone: (902) 424-8188; Fax: (902) 424-3375; E-Mail: nordlib@nov.ns.ca.

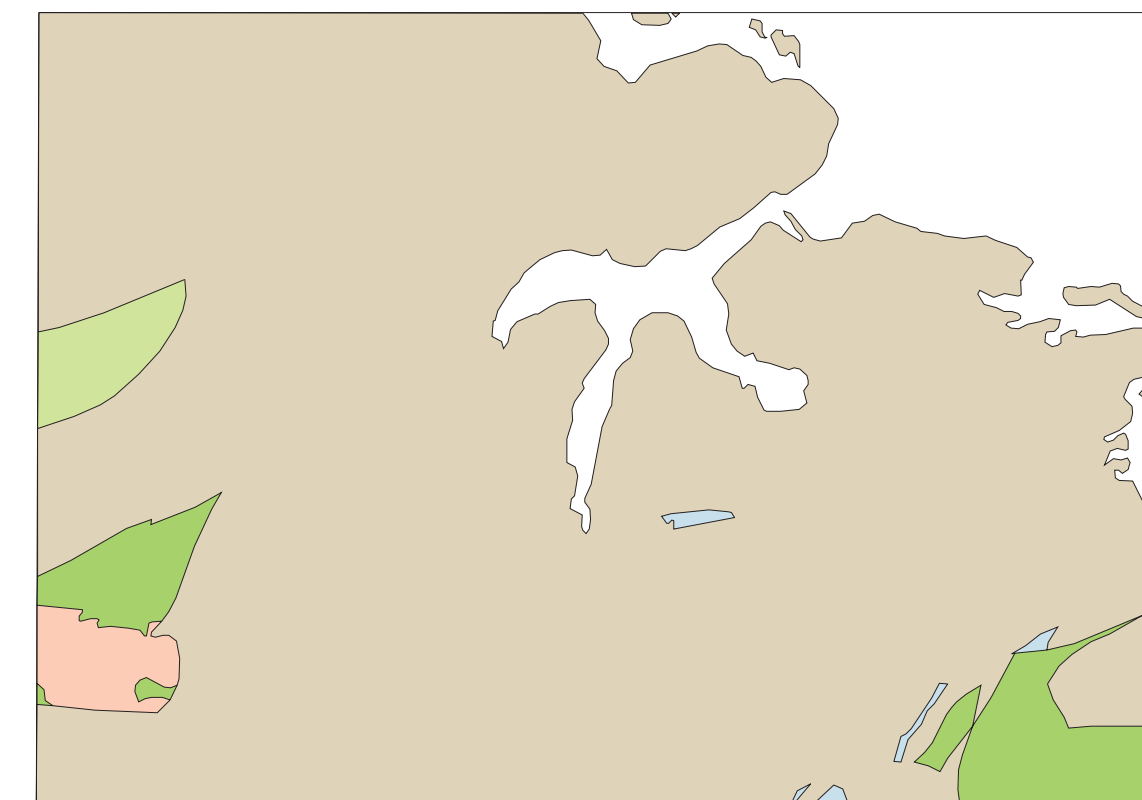
Base data derived from the Nova Scotia Topographic Database (NSTDB). Copyright Her Majesty the Queen in Right of the Province of Nova Scotia. The NSTDB is available from the Service Nova Scotia & Municipal Relations, Nova Scotia Geomatics Centre (NSGC), Amherst, Nova Scotia.

This map was generated from information stored in the Mineral Resources Branch (MRB) Geographic Information System of the Nova Scotia Department of Natural Resources (NSDNR).

The thematic information shown on this map came from many different government and non-government sources. The NSDNR accepts no liability for errors, deficiencies or faults on the map. Since land-use information is dynamic and subject to change over time, updated versions of this map will be provided in the future. This map should not be used for legal purposes and should only be used at the scale portrayed on the map.



Simplified Geological Map Showing the Distribution of Igneous, Sedimentary and Metamorphic Rocks of Nova Scotia ²⁵



- | Consolidated units | | Metamorphic | | Kilometers | |
|---|--|---|--|--|--|
| | | | | 1 2 | |
| <p>Sedimentary</p> <p>eg. siliceous sand, kaolin clay</p> <p>Consolidation:</p> <p>eg. siliceous sand, kaolin clay</p> | | <p>Metamorphic</p> <p>Metasediment and Metapetrogenesis (Lithology):</p> <p>eg. marble, mica, garnet, amphibole</p> <p>Metaschists:</p> <p>eg. marble, base metals, gold</p> | | <p>Igneous</p> <p>Intensive:</p> <p>eg. granite, gneiss, diorite, felsite, gabbro, gabbro diorite</p> <p>Extensive:</p> <p>eg. basalt, rhyolite, andesite, granite, pegmatite, diorite, gabbro, gabbro diorite, granite, pegmatite, diorite, gabbro, gabbro diorite</p> | |

References and Notes

Mineral occurrence database, NSDNR, 1999. Digital Geoscience Data Product DP 001b, Version 3, 1998. This database can be used with DP 001a, the Mineral Occurrence Query Program, which is a viewing and searching program with instructional manual for use with Mineral Occurrence Database.
See: <http://www.gov.ns.ca/natr/meh/pubs3.htm#databases>

²Claim Reference Maps, Mineral and Petroleum Titles, NSDNR, undated. Scale 1:31 680.

²Gold and iron districts are no longer a legal entity, although the term is still used in the literature, and so the former surveyed district boundaries are not shown. Instead a polygon is shown to flag the former mining camps and encompasses most of the historic underground workings and related mineral occurrences. Digital data set 1:11, <http://www.mrd.gov>.

⁴Evaluation of Nova Scotia's Peatland Resources. A.R. Anderson and W. A. Broughm, 1988. NSDNR Bulletin ME 6 pp109 and 3 maps, scale 1:250 000.

² Aggregate Resources Map, Cape Breton Island. W.J. Wright, 1985. NSDNR Maps ME 1985-3, 1985-4, 1985-5 and 1985-6. Scale 1:125 000 (locates and shows the type, quality and observed thickness of sand and gravel deposits).

⁷Sand and Gravel Occurrences of Nova Scotia. J.F. Fowler and G.B. Dickie, 1978. NSDNR OFR 378 (70 pages). Scale 1:50,000.

⁸Digital data set provided by NSDNR, Mineral Development and Policy Section.

¹⁰Petroleum Wells and Drillholes with Petroleum Significance, Onshore Nova Scotia. P.G. McMahon, G. Short and D. Walker. 1996. NSDNR IS ME 10. no194. See <http://www.gov.ns.ca/nat/meh/is/10.htm>

¹¹ Abandoned Mine Openings Database, NSDNR, 1999. Digital Geoscience Data Product DP 010. Version 2, 2000. See: <http://www.gov.ns.ca/natr/meb/pubs3.htm#databases>

Drillhole database: NSDNR 2000, Digital Geoscience Data Product DP 003, Drillholes database, Version 2, 2000. Drillholes plotted include only those holes with lithologic logs or overburden thicknesses. See: <http://www.gov.ns.ca/natr/mdb/pubs3.htm#databases>

¹⁴Units showing sulphide bearing zones are mainly Halifax Formation rocks which may contain bands of

¹⁷Units showing potential karst areas are mainly (early Windsor Formation rocks) comprised of gypsum, anhydrite and limestone which under certain conditions can develop sinkholes).

¹⁶ Surficial Geology Map of the Province of Nova Scotia. R.R. Stea, H. Conley and Y. Brown. 1992. NSDNR Map ME 1992-3, scale 1:500 000. Digital Geoscience Data Product D92-03, Version 1, 2000. See: <http://www.gov.ns.ca/nat/meb/pub3.htm#maps>

¹⁷ Digital Data set provided by Service Nova Scotia & Municipal Relations, Nova Scotia Geomatics Centre, and Department of Environment and Labour.

Geological Highway Map of Nova Scotia, Second Edition. H. V. Dorence, Jr., and R. G. Grammitt, 1989. Scale 1:640 000, NSDNR, OP ME 1989-1 (Atlantic Geoscience Society, Special Publication Number 1). (Note: the sites shown are meant to provide additional information for ecotour promotion.)

²⁰Data sets digitized from maps provided by the Canadian Department of National Defense.

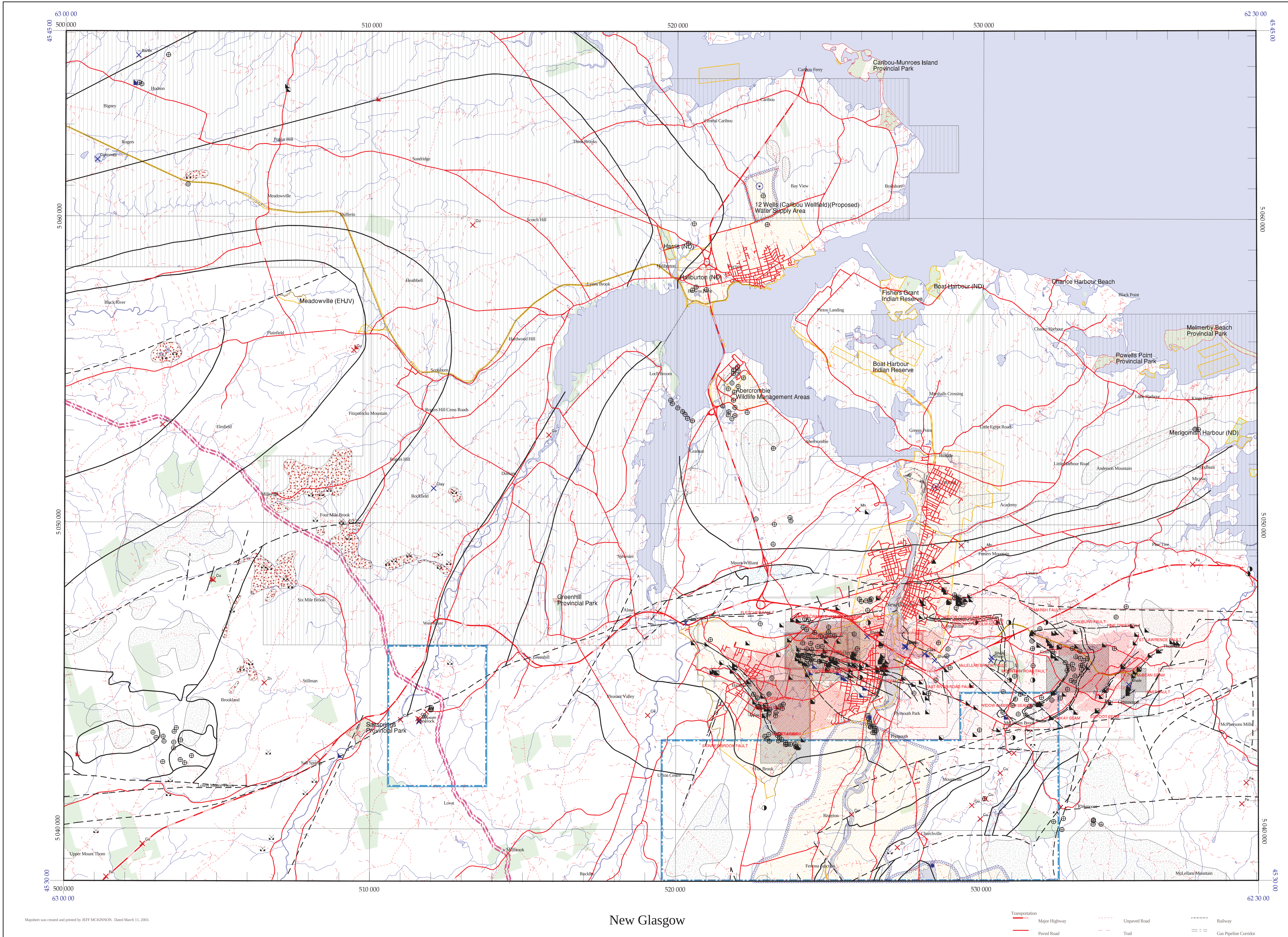
** 2026 Restricted and Limited Use Land Database, NSDNR, Digital Data Product DP DNR 002, 2002.

²² NSDNR, Renewable Resources Branch, Parks and Recreation Division.

²⁴NSDNR, Land Services Branch, Surveys Division.

²⁵NSDNR, Renewable Resources Branch, Wildlife Division.

²⁹Nature Conservancy of Canada.



MINERAL AND AGGREGATE RESOURCES

- | | |
|---|---|
|  |Mineral Occurrence (metallic, non-metallic) |
|  |Active Mine/Quarry ⁷ (metallic, non-metallic)
.....(lesse/permit boundary) |
|  |Gold Mining Area ³ (former gold district) |
|  |Iron Mining Area ³ (former iron district) |
|  |Crown Limestone Area ² |
|  |Sand/Gravel Deposit ^{5&7} |
|  |Aggregate Pit/Quarry ^{5&7} |
|  |Horticultural Peat Occurrence ⁴ |

ENERGY RESOURCES

- Active Coal Mine ² (lease/permit boundary)

Coal Seam Trace ⁸
Fuel Peat Occurrence ⁴
Geothermal Resource Area ²
Surface Petroleum Show ⁹
Well /Drill hole with Petroleum Significance ¹⁰
Underground Gas Storage ²

(exploration area, exploration permit)

GEOLOGY FOR LAND-USE / ENVIRONMENTAL PLANNING

- | | | | |
|---|--|---|---|
|  |Areal Extent of Underground Coal Mine Workings ⁸ |  |Potential Karst Area ^{13,15} |
|  |Abandoned Underground Mine Opening
(metallic, non-metallic, coal) ¹¹ |  |Exposed Bedrock/Thin Till Cover ¹⁶ |
|  |Abandoned/Inactive Surface Mine/Quarry ⁹
(Data is not available at this time) |  |Drumlin ³⁶ |
|  |Reclaimed Surface Mine Site ⁸
(Data is not available at this time) |  |Flood Risk Area ¹⁷ (20 yr. flood level) |
|  |Drill Hole ¹² |  |Water Supply Watershed Intake ¹⁸ |
|  |Sulphide-bearing Slate ^{13,14} |  |Water Supply Well ¹⁹ (Municipal) |
|  |Geological Contacts ²⁵ |  |Special Geological Interest ³⁸ |
|  |Faults ¹⁰ | | |

LAND DESIGNATION AND ACCESS

The land owner's permission is required to gain access to any land in Nova Scotia.

- | | Protected Area |
|--|---|
| | (Strictly no access to commercial and industrial use by order of legislation, regulation, policy or private interest) |
| | National Parks and Adjacent ¹ , National Historic Sites and Parks ² , National Wildlife Management Areas ³ , National Defence Land ⁴ and National Wildlife Reserves ⁵ , Designated Provincial Parks and Park Reserves ⁶ , Wilderness Areas ⁷ , Protected Reaches ⁸ , Marine Quays ⁹ , Marine Co-Operation of Canada (MCC) ¹⁰ , Areas under the Special Places Act ¹¹ , Flight III Act ¹² |
| | |
| | Limited Access Area |
| | (Access is possible although objection of tenant will vary. Areas are usually identified for specific interest and access depends on the request by owner, operator, or special interest depending upon the proposed activity) |
| | Provincial Game Sanctuaries ¹³ , Provincial Wildlife Management Areas ¹⁴ , Water Supply Areas (Designated and Non-Designated) ¹⁵ , Canadian Heritage Rivers ¹⁶ , Indian Reserve Lands ¹⁷ , Urban and Rural Land ¹⁸ , National Significance (NSN) ¹⁹ , Haggis & Gore Preservation Areas ²⁰ , Aquacultural Areas (Pipeline Corridor) ²¹ , Operational Non Designated Parks and Reserves ²² , Non Designated Rail Corridors ²³ , Karner Warbler Sites ²⁴ , Eastern Habitat Joint Venture Lands (EHJV) ²⁵ and Trade Area Lands ²⁶ |
| | |
| | General Access Area |
| | (This includes all privately-owned land as protected or limited use) |
| | (This has not been designated) |
| | Privately Owned Land |