NOVA SCOTIA
Natural Resources
MINERAL RESOURCES BRANCH

MINERAL RESOURCE LAND-USE MAP OF THE BERWICK AREA (21H/2) (1:50 000)

OFM ME 2000-4 (21H/2)
Version 2

21H/2
Berwick

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 destribution 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.

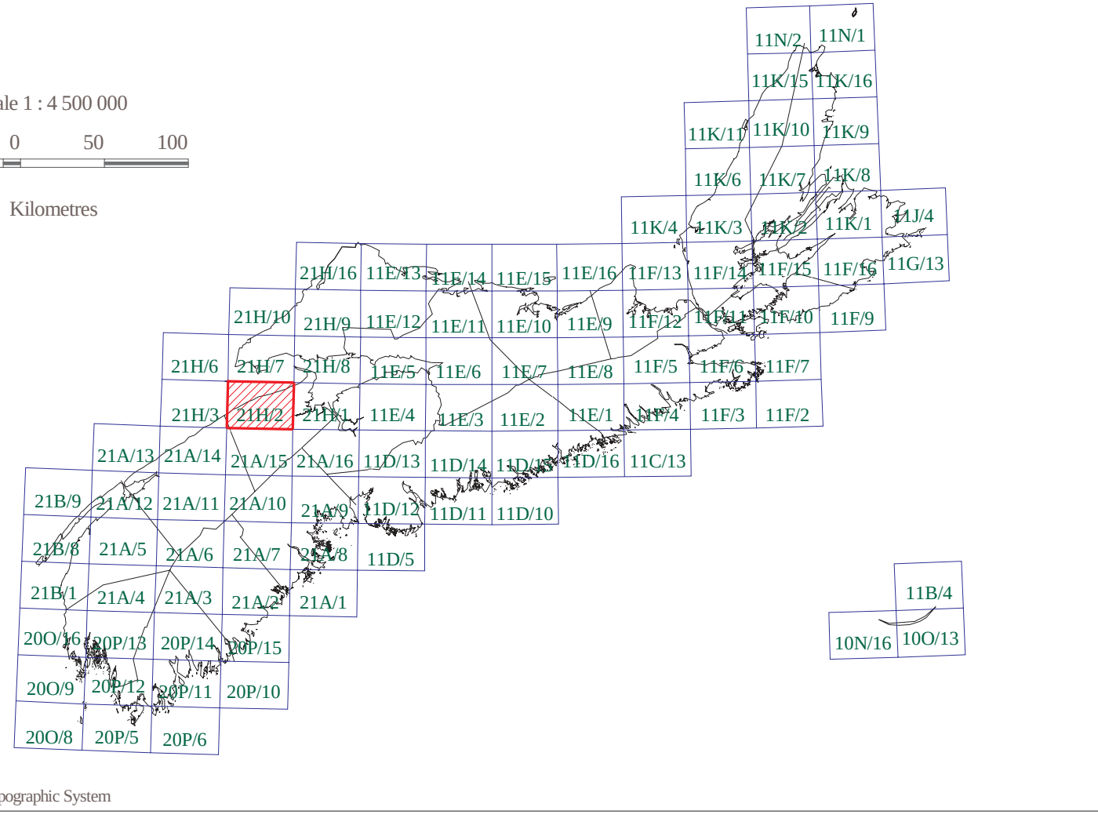
Over the course of developing this project, several compilers have contributed to the preparation of these maps, which involved gathering and organizing data from databases managed by the department as well as other government departments, agencies and non-government organizations. The manual compilers include: David Hopper, Cheryl Dobson, Geoffrey Katz, Hugh Gillis, Fred Bonner, Janet Webster, and Mai Ngyen. 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 2T9. Telephone: (902) 424-8188; Fax: (902) 424-3375; E-Mail: nsdnrlib@gov.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 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.

Mineral Resource Land Use Atlas: 1:50,000 NTS [1] Index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50 0 50 100
Kilometres
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11K/6
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11K/2
11K/1
11J/4
21H/16
11E/13
11E/14
11E/15
11E/16
11F/13
11F/14
11F/15
11F/16
11G/13
21H/10
21H/9
11E/12
11E/11
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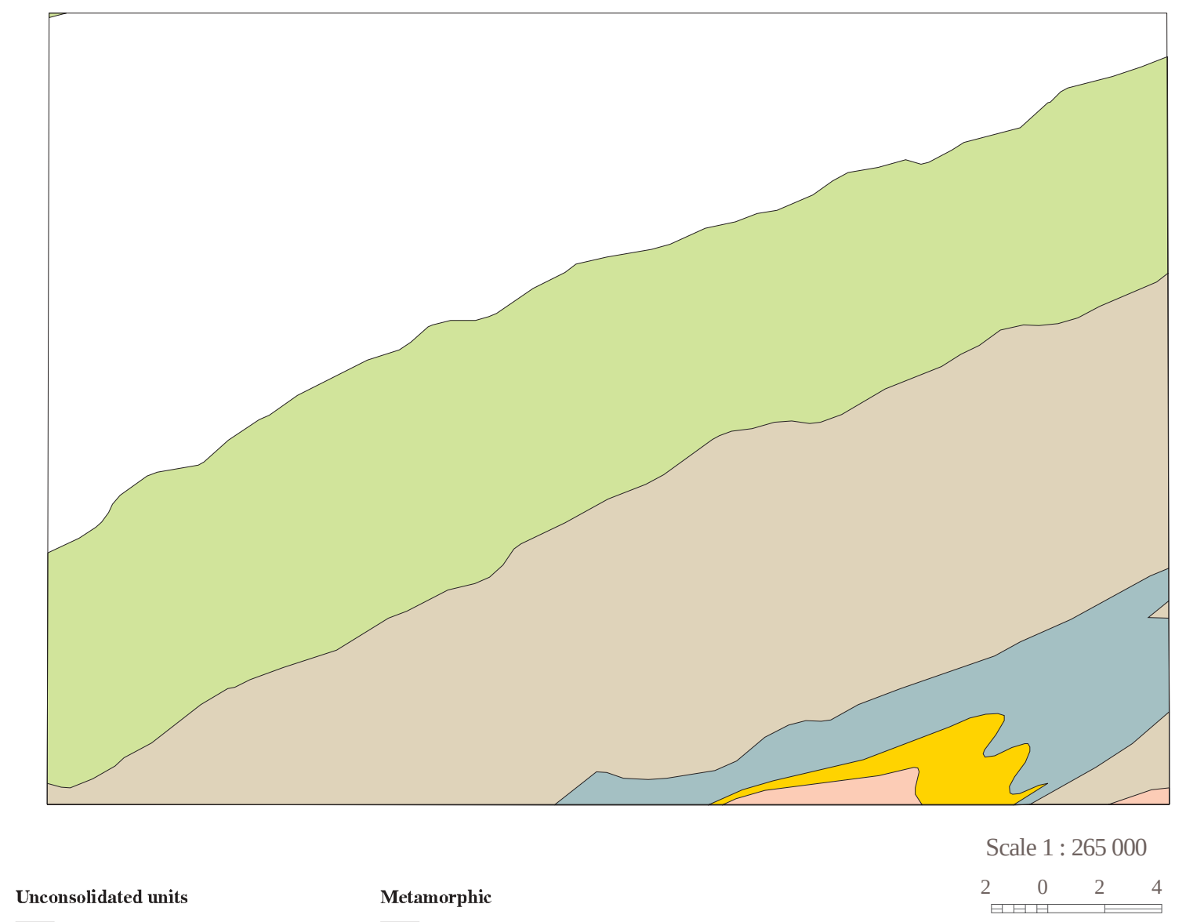
20P/14
20P/15
10N/16
10O/13
20O/9
20P/12
20P/11
20P/10
20O/8
20P/5
20P/6

[1] National Topographic System

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


Scale 1 : 265 000
2 0 2 4
Kilometres

Unconsolidated units
- 🟩 eg. silica sand, kaolin clay; Commodities: eg. silica sand, kaolin clay

Sedimentary
- 🟫 Clastic and Organic: eg. sandstone, coal, siltstone, shale, conglomerate; Commodities: eg. coal, building stone barite, copper, lead, zinc, iron, shale
- 🟦 Evaporites: eg. gypsum, salt, limestone, anhydrite; Commodities: eg. gypsum, salt, limestone, anhydrite

Metamorphic
- 🟩 Metasediment and Metavolcanics Undivided: eg. slate, marble, schist, gneiss, amphibolite; Commodities: eg. marble, base metals, gold
- 🟨 Metasediments-Gold-bearing metasediments: eg. greywacke, quartzite, slate; Commodities: eg gold, aggregate, tungsten, zinc, lead
- 🟦 Metasediments-Sulphide-bearing meatsediments: slate; Commodities: base metals

Igneous
- 🟧 Intrusive: eg. granite, granodiorite, diorite, diabase, gabbro; Commodities: eg. building stone, aggregate, tin, copper, lead, zinc
- 🟩 Volcanic: eg. basalt, tuff, rhyolite; Commodities: eg. aggregate, zeolites, copper, lead, zinc

References and Notes

[1] 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/meb/pubs3.htm#databases

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

[3] Gold 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 encompass most of the historic underground workings and related mineral occurrences. Digital data set provided by NSDNR, Mineral Resources Branch.

[4] Evaluation 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.

[5] 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).

[6] Aggregate Potential of Cumberland and Colchester Counties, 14 Preliminary Map Sheets. G. Prime, 1991. NSDNR OFM ME 1991-5 to OFM ME 1991-18. Scale 1:50 000.

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

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

[9] Surface Petroleum Shows, Onshore Nova Scotia. G. Short, 1986. NSDNR IS ME 11. March 1986, pp33. See: http://www.gov.ns.ca/natr/meb/pubs2.htm#is

[10] Petroleum Wells and Drillholes with Petroleum Significance, Onshore Nova Scotia. P.G. McMahon, G. Short, and D. Walker, 1986. NSDNR IS ME 10. pp194. See: http://www.gov.ns.ca/natr/meb/is/is10.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

[12] 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/meb/pubs3.htm#databases

[13] Geological Map of the Province of Nova Scotia. J. D. Keppie, 2000. NSDNR Map ME 2000-1. Scale 1:500 000. Digital Geoscience Data Product D00-01, Version 1, 2000. See: http://www.gov.ns.ca/natr/meb/pubs3.htm#maps

[14] Units showing sulphide bearing slates are mainly Halifax Formation rocks which may contain bands of arsenic-bearing slate which will likely produce acid drainage.

[15] Units 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/natr/meb/pubs3.htm#maps

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

[18] Geological Highway Map of Nova Scotia, Second Edition. H.V. Donohoe, Jr., and R. G. Grantham, 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.

[19] Simplified geological map showing the distribution of igneous, sedimentary and metamorphic rocks of Nova Scotia, Bonner, F.J., Fisher, B.E., and Hopper, D.B.,2000. Map in progress, scale 1:500 000.

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

[21] Data set provided by the Nova Scotia Department of Agriculture and Fisheries.

** [22-28] Restricted and Limited Use Land Database, NSDNR. Digital Data Product DP DNR 002, 2002. See http://www.gov.ns.ca/natr/meb/DOWNLOAD/rlul.htm; data provided by:

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

[23] Nova Scotia Department of Environment and Labour, Protected Areas Division.

[24] NSDNR, Land Services Branch, Surveys Division.

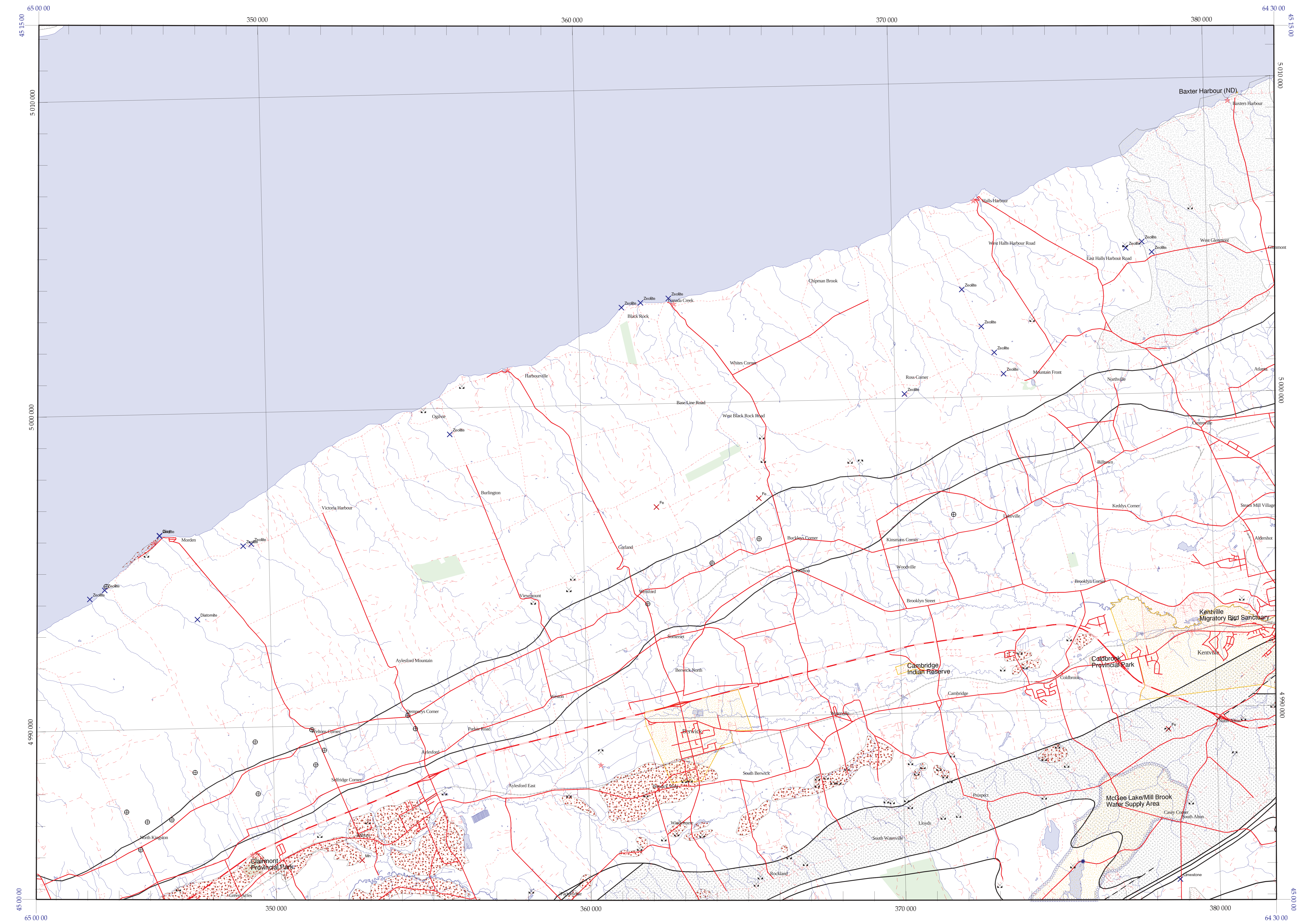
[25] Parks Canada

[26] NSDNR, Renewable Resources Branch, Wildlife Division.

[27] NSDNR and Canadian Wildlife Services.

[28] Nature Conservancy of Canada.

[29] NSDNR, Mineral Resources Branch.


65 00 00
45 15 00
350 000
360 000
370 000
380 000
64 30 00
5 010 000
5 000 000
4 990 000
45 00 00
Baxter Harbour (ND)
Baxters Harbour
Halls Harbour
West Halls Harbour Road
East Halls Harbour Road
West Glenmont
Glenmont
Chipman Brook
Zeolite
Canada Creek
Black Rock
Whites Corner
Harbourville
Base Line Road
West Black Rock Road
Ross Corner
Mountain Front
Northville
Atlanta
Ogilvie
Centreville
Burlington
Victoria Harbour
Fe
Clay
Morden
Diatomite
Garland
Buckleys Corner
Kinsmans Corner
Lakeville
Billtown
Keddys Corner
Steam Mill Village
Aldershot
Woodville
Grafton
Welsford
Viewmount
Brooklyn Corner
Brooklyn Street
Somerset
Kentville Migratory Bird Sanctuary
Kentville
Aylesford Mountain
Berwick North
Coldbrook Provincial Park
Coldbrook
Cambridge Indian Reserve
Cambridge
Weston
Dempseys Corner
Weltons Corner
Parker Road
Waterville
North Alton
Berwick
Aylesford
Selfridge Corner
Aylesford East
South Berwick
Berwick West
Prospect
McGee Lake/Mill Brook Water Supply Area
Casey Corner
South Alton
Auburn
Windermere
Lloyds
South Waterville
North Kingston
Mn
Clairmont Provincial Park
Rockland
Green Acres
Factorydale
Limestone

Mapsheet was created and printed by JEFF MCKINNON. Dated November 27, 2002.

Berwick

Transportation

═	Major Highway	- - -	Unpaved Road	┼┼┼┼	Railway
—	Paved Road	— —	Trail	═ = =	Gas Pipeline Corridor

MINERAL AND AGGREGATE RESOURCES

- ✕ ✕ ....Mineral Occurrence (metallic, non-metallic) [1]
- ▨ ▨ ....Active Mine/Quarry [2] (metallic, non-metallic) (lease/permit boundary)
- ▤ ....Gold Mining Area [3] (former gold district)
- ▨ ....Iron Mining Area [3] (former iron district)
- ▭ ....Crown Limestone Area [2]
- ▨ ....Sand/Gravel Deposit [5,6,7]
- ⚒ ....Aggregate Pit/Quarry [5,6,7]
- ▤ ....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]
- ◣ ◣ ◣ ....Abandoned Underground Mine Opening [11] (metallic, non-metallic, coal)
- ⬚ ....Abandoned/Inactive Surface Mine/Quarry [8] (Data is not available at this time)
- ▦ ....Reclaimed Surface Mine Site [8] (Data is not available at this time)
- ⊕ ....Drill Hole [12]
- ▨ ....Sulphide-bearing Slate [13,14]
- — ....Geological Contacts [25]
- — — - ....Faults [13]
- ▨ ....Potential Karst Area [13,15]
- ▨ ....Exposed Bedrock/Thin Till Cover [16]
- ▨ ....Drumlin [16]
- ▭ ....Flood Risk Area [17] (20 yr. flood level)
- ▨ ....Water Supply Watershed Intake [17,49] (⊸)
- ⊙ ....Water Supply Well [17] (Municipal)
- ✩ ....Special Geological Interest [18]

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 Adjuncts [25], National Historic Site and Parks [25], National Wildlife Management Areas [27], National Defence Land [20], National Wildlife Sanctuaries, [27], Designated Provincial Park and Park Reserve [22], Wilderness Areas [23], Protected Beaches, [24], Mineral Closure [2], Nature Conservancy of Canada (NCC) [28], Areas under the Special Places Act [22], Flight 111 Act [24]

▨ ....Limited Access Area
(Access is possible although certainty of tenure will vary. Areas are usually identified for specific interests and access permission could be limited by owner, operator, or special interest depending upon the proposed activity.)

Provincial Game Sanctuaries [26], Provincial Wildlife Management Areas [26], Water Supply Areas (Designated and Non-Designated) [17], Canadian Heritage Rivers [24], Indian Reserve Lands [24], Urban Area, [17] Sites of Ecological Significance (SES) [22], Peggy's Cove Preservation Area, [24] Aquacultural Areas, [21] Pipeline Corridor, [24] Operational Non Designated Parks and Reserves (NC), [22] Non Designated Rail Corridors [22], Ramsar Wetland Sites [26], Eastern Habitat Joint Venture Lands (EHJV) [26], and Trails Act Lands [22]

🟩 ....General Access Area
(This includes all province-owned land [20] that has not been designated as protected or limited use.)

☐ ....Privately Owned Land