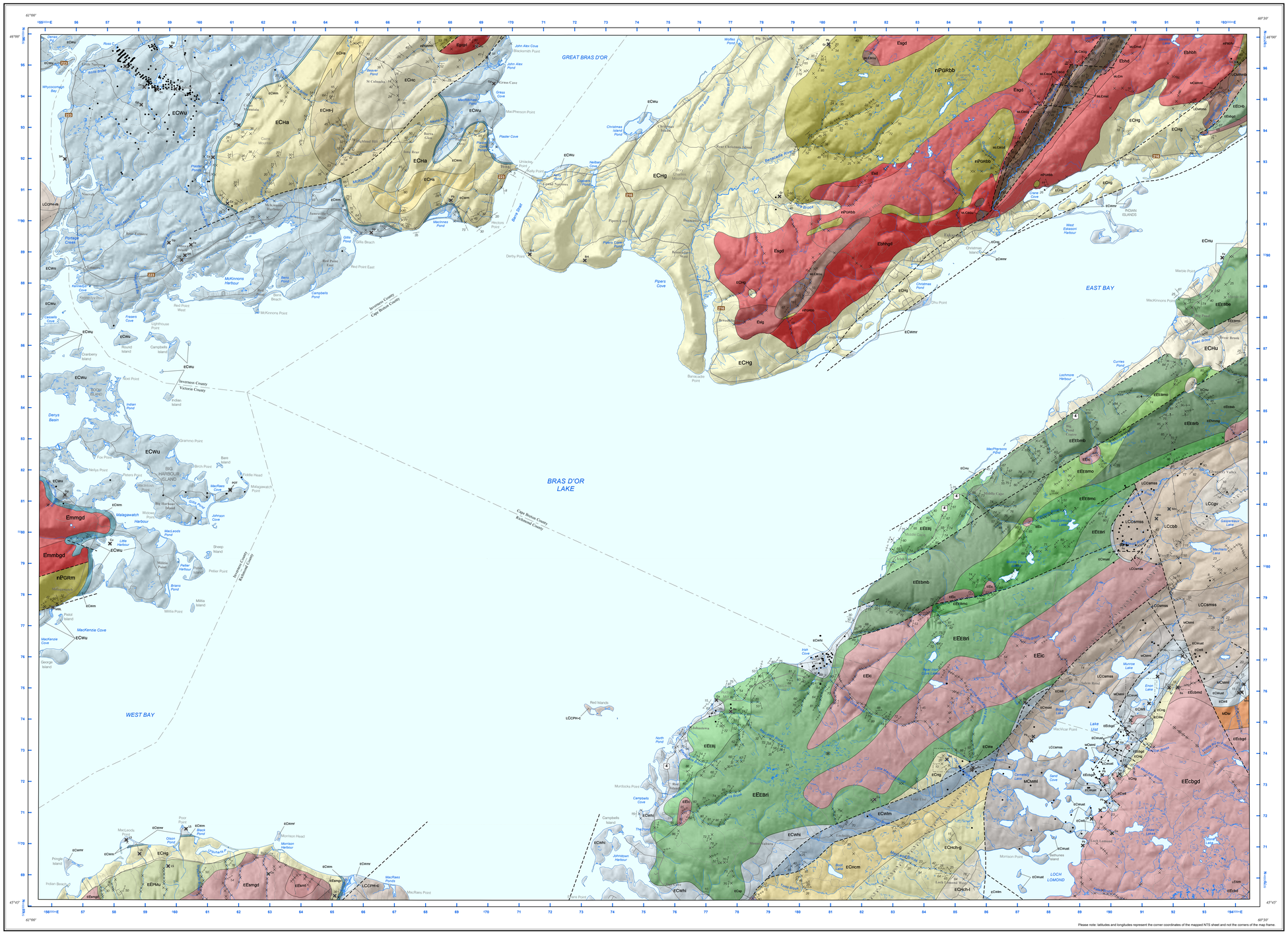


Please note: latitudes and longitudes represent the corner coordinates of the mapped NTS sheet and not the corners of the map frame.

LEGEND*

Legend Key

Code Unit label — Unit name

DC - ECWcc - Carrolls Corner Formation

Unit Terrane or Assemblage Code:
DC - Late Devonian, Carboniferous & Mesozoic
AT - Aspy Terrane
BT - Bras d'Or Terrane
MT - Mira Terrane
BIR - Blair River Inlier
CP - Cape Porcupine Complex

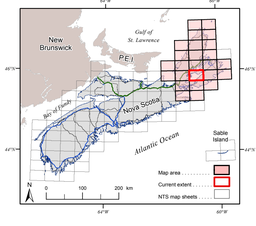
- DC - LCCgv - Glengarry Valley Formation
- DC - LCCbb - Big Barren Formation
- DC - LCCPH-c - Colindale Member
- DC - LCCPH-m - Margaree Member
- DC - LCCsmss - Silver Mine Formation
- DC - MCMml - MacKeigan Lake Formation
- DC - ECWu - Windsor Group (undivided)
- DC - ECWhi - Hood Island Formation
- DC - ECWust - Uist Formation
- DC - ECWll - Loch Lomond Formation
- DC - ECWe - Enon Formation
- DC - ECWmr - Meadows Road Formation
- DC - ECWlm - Lower Middle Windsor Group (undivided)
- DC - ECWm - Macumber Formation
- DC - ECsp - St. Peters Gabbro
- DC - ECHu - Horton Group (undivided)
- DC - ECHa - Ainslie Formation
- DC - ECHcm - Caledonia Mills Formation
- DC - ECHs - Strathlorne Formation
- DC - ECHs-j - Strathlorne Formation - Judique Facies
- DC - ECHc - Creignish Formation
- DC - ECHch-g - Goose Harbour Lake Member
- DC - ECHch-l - L'Ardoise Member
- DC - ECHg - Grantmire Formation
- BT - MLCm - MacNeil Formation
- BT - MLCmst - MacMullin Formation
- BT - MLCBGu - Bourinot Group (undivided)
- BT - MLCBGg - Gregwa Formation
- BT - MLCBGd - Dugald Formation
- BT - MLCBGe - Eskasoni Formation
- BT - Ebhbh - Boisdale Hills Pluton - biotite-hornblende granodiorite
- BT - Ebhhgd - Boisdale Hills Pluton - hornblende granodiorite
- BT - Ebhd - Boisdale Hills Pluton - diorite
- BT - Egcgd - Grass Cove Pluton
- BT - Emmgd - Marble Mountain Pluton - granodiorite
- BT - Emmbgd - Marble Mountain Pluton - biotite granodiorite
- BT - Eslg - Shunacadie Pluton - leucogranite
- BT - Esgd - Shunacadie Pluton - granodiorite
- BT - Esd - Shunacadie Pluton - diorite
- BT - nPGRbb - Benacadie Brook Formation
- BT - nPGRm - Malagawatch Formation
- BT - nPGRmh - Maskells Harbour Formation
- BT - nPBdfv - Frenchvale Road Metamorphic Suite
- MT - MDsr - Salmon River Rhyolite Porphyry
- MT - LCMRmb - McAdams Brook Formation
- MT - LCMRmn - McNeil Formation
- MT - MCMRml - MacLean Brook Formation
- MT - EEcbd - Chisholm Brook Plutonic Suite - diorite
- MT - EEcbgd - Chisholm Brook Plutonic Suite - granodiorite
- MT - EEcbmd - Chisholm Brook Plutonic Suite - monzodiorite
- MT - EEhmmg - Huntington Mountain Pluton - monzogranite
- MT - EEIc - Irish Cove Pluton
- MT - EEsmgd - Sporting Mountain Pluton - granodiorite
- MT - EEsmt - Sporting Mountain Pluton - tonalite
- MT - EEsmgv - Sporting Mountain Pluton - sheared granitic and volcanic rocks
- MT - EEsbgd - Spruce Brook Pluton - granodiorite
- MT - EEesj - Johnstown Formation
- MT - EEEbe - Ben Eoin Formation
- MT - EEEbmb - McIntyres Brook Formation
- MT - EEEbmo - Mountain Lake Formation
- MT - EEErb - Rear Big Pond Formation
- MT - EEEbsb - Sgurra Bhreac Formation
- MT - EEEbmc - Middle Cape Lakes Formation
- MT - EEEbri - Rear Irish Cove Formation
- MT - EECHb - Beechmont Formation
- MT - EEPMu - Pringle Mountain Group (undivided)
- MT - LCSrn - Rory Neills Lake Formation

*** Note:** For full unit description and terrane information, please refer to the detailed legend for the Cape Breton Compilation Project - Open File Illustration ME 2017-001

Symbols**

- Outcrop, Float
- Drillhole (after O'Neill et al., 2016)
- Mineral occurrence (modified after O'Reilly et al., 2016): (Ag - silver, AGG - aggregate, Au - gold, Ba – barium, Bit – barite, Bi - bismuth, BS – building stone, Cls – Celestite, CLY – clay, C – coal, Cr – chromium, Cu - copper, DIA – diatomite, Dol – Dolomite, F – fluorine, Fe - iron, Gr – graphite, Gp – gypsum, LS – limestone, MBL – marble, Mg - Magnesium, Mn – Manganese, Mo - molybdenum, Ms – Muscovite, Ni – Nickel, Pb – lead, POT – potash, Prl – Pyrophyllite, SA – salt, SH – shale, SIL – silica, Sn – tin, Sr - strontium, U - uranium, W - tungsten, Zn - ZNC)
- Bedding; tops known (inclined, vertical, overturned)
- Bedding; tops unknown (inclined, vertical)
- Fold axis (fold style unknown, s fold, z fold)
- Foliation (inclined, vertical)
- Intersection lineation
- Mineral lineation
- Geological contact
- Fault
- Thrust fault
- Major coal seam (after Hennick and Calder, 2017)
- Area of concentrated drilling
- Rock in water
- Trans Canada highway
- Highway
- Arterial highway (CT = Cabot Trail, Hwy 30)
- Collector highway
- Local road
- Seasonal, restricted or private road
- Trail, track
- Railway (active, inactive)
- River, stream
- Boundary (county, inter-provincial)
- Transmission line
- Cape Breton Highlands National Park
- Wetlands
- Dam
- Lake, ocean

**** Note:** Compiled symbols list for Open File Maps ME 2017-007 to 2017-031. All symbols may not appear on each map.



Map Notes

GIS databases, cartography and reproduction by Angie Barras, David Hapgood and Jeff McKinnon of the Nova Scotia Department of Natural Resources, Geoscience Information Services Section, 2012-2017. The GIS databases and map were developed using ArcGIS® 10.2.2.

Universal Transverse Mercator Projection (UTM), Zone 20, Central Meridian 63°00' West. North American Datum (NAD) 1983 Canadian Spatial Reference System (CSRS) 98.

Base and digital 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 Department of Internal Services, Nova Scotia Geomatics Centre (NSGC), Amherst, Nova Scotia.

Shaded relief image derived from a 25 m Digital Elevation Model of the Province of Nova Scotia, DP ME 56, version 2, 2006. Azimuth of 315°, sun angle of 45° and a vertical exaggeration of 5.

In compiling the maps and legend, unit names and ages were taken mainly from the source references, with no attempt to reconcile that information across Cape Breton Island, to remove duplicate names, or to re-interpret areas of geological inconsistencies that are not the work of the compilers.

Acknowledgments

Most of the geological information on this map sheet was compiled from work by Barr and Setter (1986a, b), Barr et al. (1988, 1996), Lynch et al. (1995), Sexton (1988), Wasylik (2004), Wasylik et al. (2005), White and Barr (1998a) and White et al. (1994). Full reference information for those publications, as well as others used in map compilation, is available in the accompanying open file report. Karen Johnston, Dallas Macisaac and Christa Pufahl did much of the digitizing of original field locations from 1:10 000 scale orthophoto base maps. We thank Angie Barras, David Hapgood and Jeff McKinnon for their help in producing these maps and the associated database. Sandra Barr acknowledges the long-term support of the Natural Sciences and Engineering Research Council of Canada and her employer, Acadia University. We thank Rob Raeside for reviewing the maps and providing many helpful comments.

Nova Scotia Department of Natural Resources
Geoscience and Mines Branch

Open File Map ME 2017-014

Bedrock Geology Map of the Grand Narrows Area, NTS 11F/15, Cape Breton, Inverness, Richmond and Victoria Counties, Nova Scotia

Compiled by

S. M. Barr and C. E. White

Scale 1:50 000

1 0 1 2 3 4 km

Halifax, Nova Scotia
2017

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Recommended Citation

Barr, S. M. and White, C. E. 2017: Bedrock geology map of the Grand Narrows area, NTS 11F/15, Cape Breton, Inverness, Richmond and Victoria Counties, Nova Scotia; Nova Scotia Department of Natural Resources, Geoscience and Mines Branch, Open File Map ME 2017-014, scale 1:50 000.

Disclaimer

The information on this map may have come from a variety of government and nongovernment sources. The Nova Scotia Department of Natural Resources does not assume any liability for errors that may occur. This map is intended for use at the published scale of 1:50 000.

Selected References

For a complete list of references please refer to Open File Report ME 2017-002.

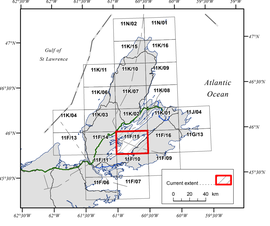
Barr, S. M. and White, C. E. 2017: List of compilation sources for bedrock geology maps of Cape Breton Island, Nova Scotia (Open File Maps ME 2017-006 to 2017-031); Nova Scotia Department of Natural Resources, Open File Report ME 2017-002, 7 p.

Hennick, E. W. and Calder J. H. 2017: Nova Scotia Coal Database; Nova Scotia Department of Natural Resources, Digital Product ME 120, unpublished.

O'Neill, M. J. and Poole, J. C. 2016: Nova Scotia drillhole database; Nova Scotia Department of Natural Resources, Digital Product ME 3, version 5; http://www.gov.ns.ca/natr/meb/download/dp003.asp [ISN:18535]*.

O'Reilly, G. A., DeMont, G. J., Fisher, B. E. and Poole, J. C. 2016: Nova Scotia mineral occurrence database; Nova Scotia Department of Natural Resources, Digital Product ME 2, Version 11; http://novascotia.ca/natr/meb/download/dp002.asp [ISN:18752].

* Internal Search Number (ISN) is a unique identifier used in NovaScan - the Nova Scotia Geoscience Maps and Publications Database. The ISN can be used to retrieve a digital version of the listed citation - http://novascotia.ca/natr/meb/



NOVA SCOTIA

Open File Map ME 2017-014

Jun 16, 2017