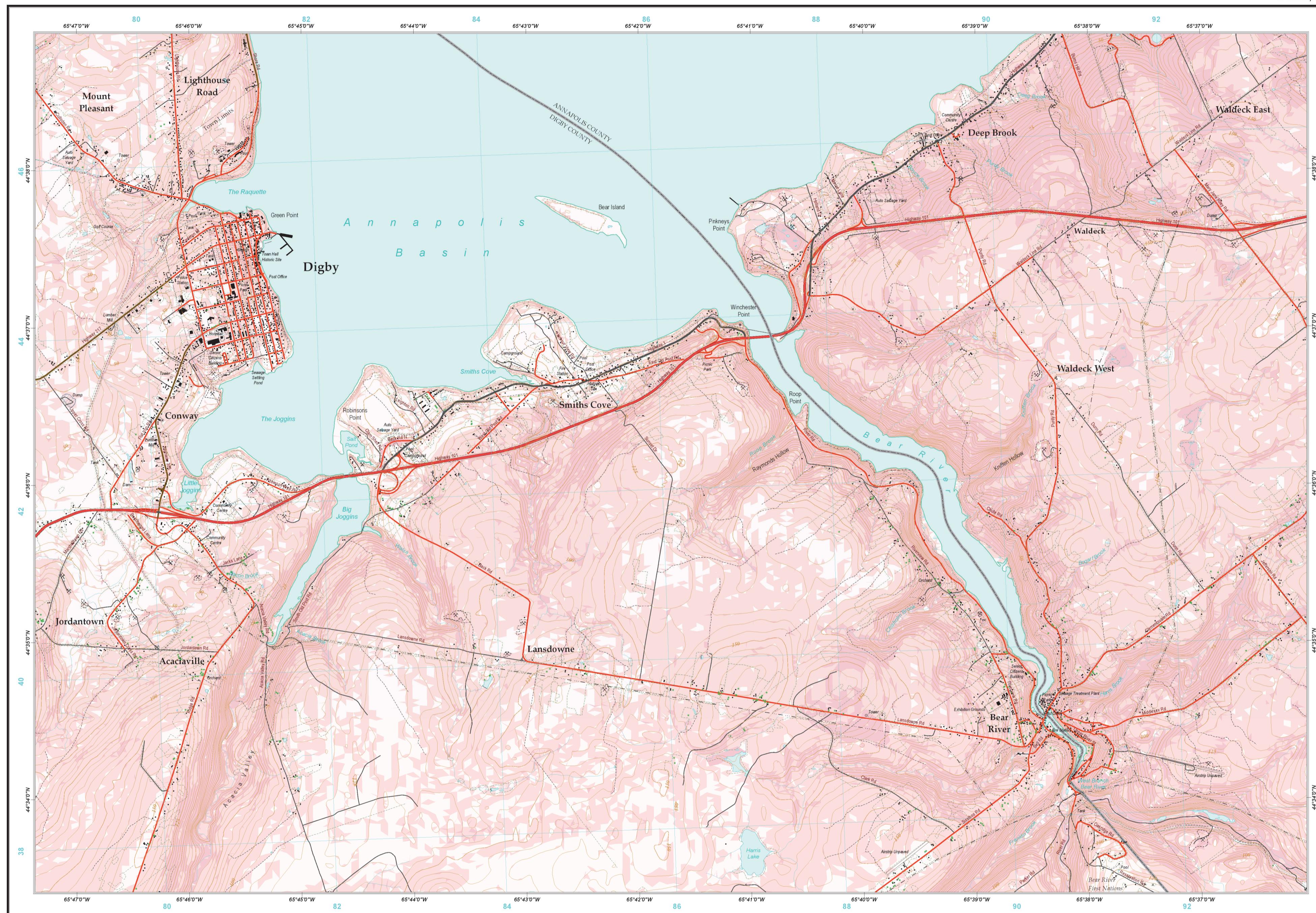


Edition 2018

NOVA SCOTIA RESOURCE SERIES

Erodibility Layer



 Centre of Geographic Sciences
COGS | nscc

Base Source: Nova Scotia Topographic Database (NSTDB)
1:10000 Enhanced Topographic Data Base
Key Map Source: Nova Scotia Specialty Maps
1:50000 Custom Theme Layers
Compliments of the Nova Scotia Geomatics Centre (NSGC)
Service Nova Scotia and Municipal Relations
160 Willow Street
Amherst, N.S.

Soils Data Source:
Canadian Soil Information Service
<http://sis.agr.gc.ca/cansis/>

Source Map Sheets:
1044550065600
1044550065700
1044600065600
1044600065700
<http://www.nscc.gov.ns.ca/>
Data Locator V 3.5.2

Town of Digby
and
Surrounding Area

Digby and Annapolis Counties
Nova Scotia

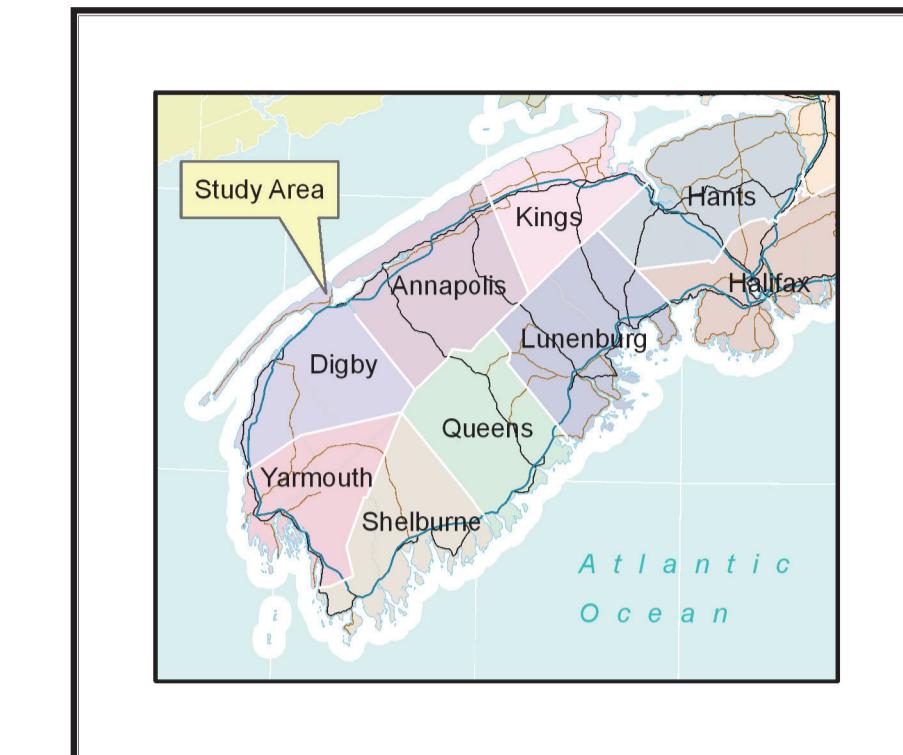
Scale: 1:30,000
1000 500 0 1000 2000 3000
Metres

Projection: Universal Transverse Mercator, Zone 20 North
Datum: North American Datum 1983 (NAD83)
Correction: Canadian Spatial Reference System 1998 (CRS98)

Magnetic North
January 2018
Calculated magnetic
declination: 16° 56' 13" W
Latitude: 44° 22' 13" N
Longitude: 65° 25' 15" W

This map is produced as a portion of the requirements of the
Geographic Sciences Program
at the Centre of Geographic Sciences, NSCC, Lawrencetown, Nova Scotia.
The product is unedited, unverified and intended
for educational purposes only.
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Produced by: Nicole White
Date: January 2018



This map uses soils survey data combined with a TIN (triangular irregular network) created of the study area to produce a susceptibility to erosion map. To derive accurate soil classifications from soil survey attribute data, string manipulation was performed, creating new identifying codes for each soil type in both Nova Scotian counties represented. Some additional string manipulation was also used for the purpose of data quality improvements. Join, dissolve, and union geoprocessing operations were then executed to simplify and refine the data.

Two new defining attributes were created using a series of Select by Attributes queries: slope percent and soil texture, which were expressed as weighted integer values.

We used our combined slope and texture data to create a new category: erodibility, which is expressed as three classes (low, medium, and high). A Python script was used within the ArcGIS Field Calculator to generate these ranked values based on analysis of the slope and soil texture attribute values. An attribute domain was assigned to this field to preserve data integrity. An appropriate colour scheme was chosen to symbolize the map according to the three defined erodibility values, and a legend in the form of a colour-coded matrix was created. To create the finished product, this thematic layer was overlaid on our previously created basemap of the study area.

Erodibility		Soil Texture							
Slope	Texture	Coarse	Moderately Coarse	Medium	Medium Fine	Moderately Fine	Fine	Pebly	Organic
≤ 1%	Low Erodibility								
1 - 3%	Medium Erodibility								
3 - 5%	Medium Erodibility								
5 - 10%	High Erodibility								
10 - 15%	High Erodibility								
15 - 25%	High Erodibility								
> 25%	No Data								

Buildings		Line Features							
•	Building	—	Structure, Wall, Dam	—	Bridge	—	Cliff	—	River, Stream, Coastline
+	Church	—	Contour	—	Conveyor	—	Depression Contour	—	Contour Approximate
:	School	—	Conveyer	—	County Boundary	—	Index Contour	—	Tree Area, Line, Row or Orchard
•	Lighthouse	—	Cliff	—	Church	—	Indian Reserve	—	Depression Contour
o	Orchard	—	River, Stream, Coastline	—	Military Reserve	—	Index Contour	—	Contour Approximate
—	Sewage Settling Pond	—	Contour	—	Municipal Boundary	—	Indian Reserve	—	Tree Area, Line, Row or Orchard
△	Swamp	—	Contour Approximate	—	Military Reserve	—	Index Contour	—	Depression Contour
·	Tank	—	Conveyer	—	Municipal Boundary	—	Indian Reserve	—	Contour
□	Tower	—	County Boundary	—	Military Reserve	—	Index Contour	—	Contour Approximate
*	Tree Individual	—	Church	—	Municipal Boundary	—	Indian Reserve	—	Tree Area, Line, Row or Orchard
×	Windmill	—	School	—	Military Reserve	—	Index Contour	—	Depression Contour

Point Features		Area Features							
•	Lighthouse	—	Structure, Wall, Dam	—	Commercial Area	—	Cemetery	—	Campground
o	Orchard	—	Bridge	—	Building or Structure	—	Cut or Fill	—	Recreation Area
—	Sewage Settling Pond	—	Cliff	—	Cemetery	—	Dump	—	Hydrography
△	Swamp	—	River, Stream, Coastline	—	Cut or Fill	—	Gravel Pit	—	Gravel Pit
·	Tank	—	Contour	—	Dump	—	Hydrography	—	Hydrography
□	Tower	—	Contour Approximate	—	Recreation Area	—	Gravel Pit	—	Gravel Pit
*	Tower	—	Conveyer	—	Hydrography	—	Hydrography	—	Hydrography
□	Tree Individual	—	County Boundary	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
×	Windmill	—	Church	—	Hydrography	—	Hydrography	—	Hydrography
—	Windmill	—	School	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
—	Windmill	—	County Boundary	—	Hydrography	—	Hydrography	—	Hydrography
—	Windmill	—	Church	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
—	Windmill	—	School	—	Hydrography	—	Hydrography	—	Hydrography
—	Windmill	—	County Boundary	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
—	Windmill	—	Church	—	Hydrography	—	Hydrography	—	Hydrography
—	Windmill	—	School	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
—	Windmill	—	County Boundary	—	Hydrography	—	Hydrography	—	Hydrography
—	Windmill	—	Church	—	Gravel Pit	—	Gravel Pit	—	Gravel Pit
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