The Canadian Urban Environmental Health Research Consortium

Canue Metadata - Neighborhood Proximity to Water Bodies
2021-02-15

DATA SET INFORMATION

Dataset Code: DTW_A_YY

Description:

Hydrology files from DMTI Spatial Inc. CanMap Content Suite for 2018 (water bodies, water lines) were downloaded via the University of Victoria library, and loaded into a PostGRES database. Specifically for distance to oceans, we used the 2011 Hydrographic Layers - coast GIS file from Statistics Canada. Distances in metres to the nearest water feature within 5 kilometres by class (defined below) was calculated using PostGRES, for all DMTI Spatial Inc. single-link postal code for all years. This assumes that water features have remained constant over time. Note: many waterbodies in Alberta were coded as unknown in the water_defn column. Any features that were otherwise coded as permanent and had a river name or lake name were re-coded as watercourse and lake respectively and added to the appropriate class prior to calculation. NOTE: Features from the DMTI waterbody file are large enough to be representing as polygons or rivers/channels with right and left banks delineated. Features from the DMTI waterline file are narrow enough that they are only represented as a single line feature, rather than having a right and left bank.

Keywords: hydrology|water|lakes|streams|ponds|ocean|canal
Place Keywords: Canada|national

GEOSPATIAL REFERENCE

Upper Left Corner: 65.14N , -141.02W
Lower Right Corner: 41.68N , -52.62W
Coordinate System: GCS_WGS84 - EPSG:4326
Geometry Type: POINT - Units: Decimal Degree
Geometry Data Source: DMTI Spatial Inc. (postal codes)

QUALITY ASSESSMENT

QA/QC Procedures:

CANUE did not assess the quality of the DMTI hydrological data. Users should review the supporting documentation and any recommended citations.

Geographic Coordinate Positional Accuracy:

These metrics are linked to the corresponding annual postal codes files for mapping and analysis purposes. Refer to the postal code metadata file in Supporting Documentation for more information.

Vertical Positional Accuracy: N/A
Attribute Accuracy: N/A
Data Validity: NoData = -9999 (for numeric fields) - NoData=null (for category fields) - Data insufficient to calculate value = -1111
Associated Files: N/A
Data Comment:

NoData = -9999 for numeric fields, indicating no water feature of a specific type within 5km.

DATA SOURCE

Data Source
See Supporting Documentation

Spatial Resolution: Postal code

Data Preparation Date: 2020-02-28

Beginning Date: 1983

End Date: 2019

Sampling Frequency of Data: Annual

Years Available:
1983 - 1984 - 1985 - 1986 - 1987 - 1988 - 1989 - 1990 - 1991 - 1992 - 1993 - 1994 - 1995 - 1996 - 1997 - 1998 - 1999 - 2000 - 2001 - 2002 - 2003 - 2004 - 2005 - 2006 - 2007 - 2008 - 2009 - 2010 - 2011 - 2012 - 2013 - 2014 - 2015 - 2016 - 2017 - 2018 - 2019

MAINTENANCE

Description: N/A

File Type: Comma separated values(.csv)

File Size: 22 to 35 MB

Number of Data Files: 37

DATA USE CONDITIONS

The Data User is REQUIRED:
(i) to acknowledge data sources listed under Acknowledgement(s)
(ii) cite the publication(s) listed under Recommended Citation(s) as the providers and source of these data when using them in support of research, analysis, operations, policy decision or any other undertaking including publication
(iii) complete and sign the CANUE Data Use and Sharing Agreement (available at http://canue.ca/data/), in which the name and signature of the researcher/analyst who takes responsibility for ensuring all conditions are met.

Data Sharing Restrictions:
These data files are provided solely for the purposes stated in the CANUE Data Sharing and Use Agreement and should not be re-distributed for any reason. These data also contain proprietary postal code data and may only be used for the project named in the CANUE Data Sharing and Use Agreement. Data can be shared only within a project team for the exclusive purposes of teaching, academic research and publishing, and/or planning of educational services in accordance to DMTI End User Agreement associated with the Spatial Mapping Academic Research Tools (SMART) Program.

Include the following references in any publications resulting from the use of these data:
[1] Distance to Water, prepared by the Canadian Urban Environmental Health Research Consortium
[2] CanMap Postal Code Suite 2015, 2016, 2017, 2018 and 2019. [computer file] Markham: DMTI Spatial Inc., 2018.
[3] CanMap Hydrology files 2018 [computer file] Markham: DMTI Spatial Inc,. 2018.

Include the following acknowledgements:
1. The following [dataset name(s)] were accessed via the Canadian Urban Environmental Health Research Consortium (CANUE) Data Portal: https://www.canuedata.ca/

SUPPORT DOCUMENTATION

1 - DMTI CanMap documentation (https://www.dmtispatial.com/canmap/)

2 - Statistics Canada hydrological file link (https://www12.statcan.gc.ca/census-recensement/alternative_alternatif.cfm?archived=1)

3 - Postal code metadata (https://canue.ca/wp-content/uploads/2019/09/CANUE-Browser-Metadata-PostalCodes.pdf)

VARIABLES

DTWYY_01 - Distance to Ocean

Distance to nearest ocean based on Statistics Canada 2011 hydrographic coast layer

DTWYY_02 - Distance to Reservoir, Pond or Lake

Distance to nearest reservoir, pond or lake based on DMTI waterbodies definitions reservoir, pond or lake

DTWYY_03 - Distance to Watercourse, Tidal River or Side Channel

Distance to nearest watercourse, tidal river or side channel based on DMTI waterbodies definitions

DTWYY_04 - Distance to Canal

Distance to nearest canal based on DMTI waterbodies definitions

DTWYY_05 - Distance to Other Water Bodies

Distance to nearest other water body based on DMTI waterbody definition of unknown

SUPPORT CONTACT

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Affiliated Organization:
CANUE (Canadian Urban Environmental Health Research Consortium)
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DATA SOURCE CONTACT

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