Managing Environmental Monitoring and Landscape Change Information in the NWT Case Studies using Web Applications

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Caslys Consulting Ltd.
May 8, 2019
www.caslys.ca



Outline

- Company Overview
- Disturbance mapping in the NWT
- Web applications
 - Inventory of Landscape Change (ILC) Map Viewer
 - GNWT Discovery Portal



Caslys Consulting

- Based near Victoria, B.C.
- Services
 - GIS and cartography
 - Remote sensing
 - Information management
 - Web maps and custom applications
- Focus on environmental and resource management, change detection, land cover mapping, and wildlife monitoring.



- Assisting land management decisions and caribour range management responsibilities
 - Cumulative effects management and modelling
 - Change detection and determination of trends
 - Wildlife, habitat, and forest management
 - Benefits Indigenous governments and other stakeholders
- Anthropogenic / Human Disturbance
 - Roads, mining, utilities
- Natural Disturbance
 - Fire, pests



- Human disturbance dataset that captured development footprints on the landscape
 - Existing GIS data baseline mapping
 - Imagery SPOT, Landsat, Sentinel-2
- Linked disturbances on the landscape with permitted development
 - Public online registries from land/water boards
- Captured attributes
 - Type of development, temporal duration, access to site, number of people
 - Assess level of activity to determine impact on environment





Home > Public Registry > MV2017C0003

92 RESOURCES CORP. - MV2017C0003



March 3, 2017 File: MV2017C0003

Mr. Adrian Lamoureux 92 Resources Corp. 1400-111 West Georgia St. VANCOUVER BC V6E 4M3

and Water

Email: William@dahrouge.com

Phone (867) 669-0506 FAX (867) 873-6610

Dear Mr. Lamoureux:

Issuance of Type A Land Use Permit Mineral Exploration - Hidden Lake Area

Attached is Type A Land Use Permit MV2017C0003 granted by the Mackenzie Valley Land and Water Board (MVLWB or the Board) in accordance with the *Mackenzie Valley Resource Management Act* (MVRMA). This Permit has been approved for a period of five years

1. Permit - Licence - Other Issuances All Issuances Received/Sent Uploaded Document MV2017C0003- 92 Resources Corp - Issuance Letter with Permit-Conditions and RFD - Type A LUP - Mar3-17.pdf (1.18 March 3, 2017 March 8 2017 Preliminary Screening Document Received/Sent Unloaded MV2017C0003- 92 Resources Corp - Type A Land Use Permit - Preliminary Screening - Mar3-17.pdf (467.66 KB) March 3, 2017 March 9, 2017 Security and Water Use Fees Received/Sent Uploaded MV2017C0003 - 92 Resources corp - Receipt of Security Deposit - GNWT Lands - May15-18.pdf (133.53 KB) May 15, 2018 May 17, 2018 2. Initial/Renewal Application Application and Related Docs Received/Sent Uploaded MV2017C0003 - 92 Resources Corp - Receipt for New LUP Application - Mar17-17.pdf (231.5 KB) March 17, 2017 March 20, 2017 MV2017C0003- 92 Resources Corp - Type A LUP - Staff Report and Comments - Mar3-17.pdf (1.6 MB) March 3, 2017 March 9 2017 uary 24, 2017 Conditions Annexed to and Forming Part of Land Use Permit # MV2017C0003 nuary 24, 2017

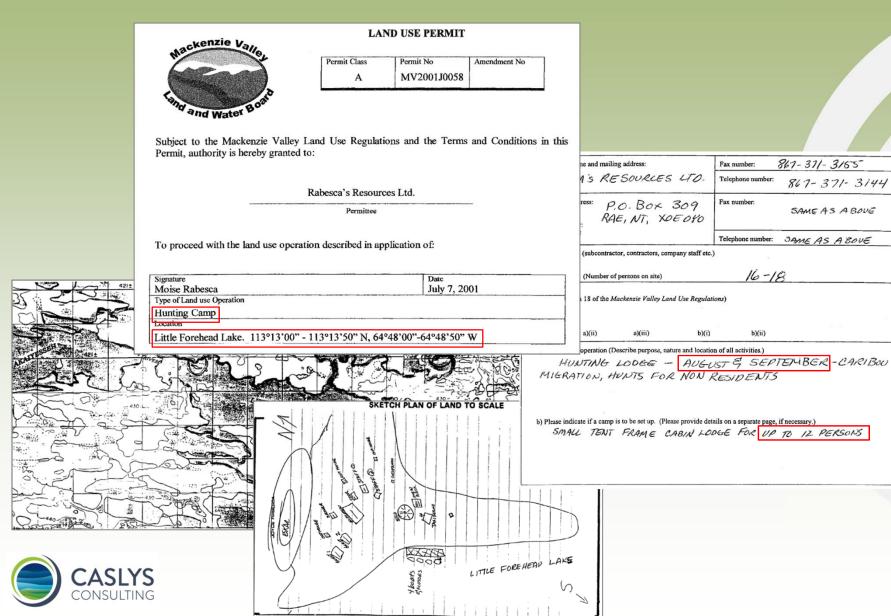
Part A: Scope of Permit

- 1. This Permit entitles the Permittee to conduct the following land-use operation:
 - a) Mineral exploration activities, including drilling;
 - b) Construction, operation and decommissioning of a camp;
 - c) Construction, maintenance and reclamation of winter access roads;
 - d) Use and storage of vehicles and equipment;
 - e) Storage of fuel;
- This Permit is issued subject to the conditions contained herein with respect to the use of land for the activities and area identified in Part A, item 1 of this Permit.
- Compliance with the terms and conditions of this Permit does not excuse the Permittee from its obligation to comply with the requirements of any applicable Federal, Territorial, Tl_Icho, or Municipal laws.

Part B: Definitions (defined terms are capitalized throughout the Permit)

Act - the Mackenzie Valley Resource Management Act.

Archaeological Overview - as defined by the Prince of Wales Northern Heritage Centre - Guidelines for Developers.



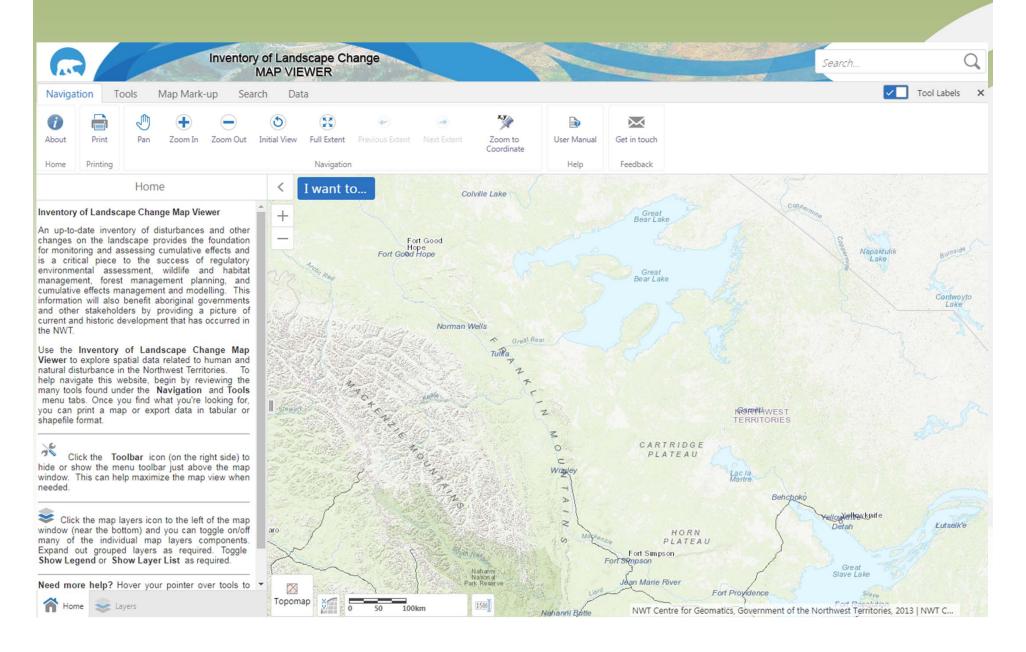
- NWT Centre for Geomatics and Cumulative Impact Monitoring Program (CIMP)
- Provides up-to-date inventory of disturbance and change on the landscape
- Human and natural disturbance information available to a wide variety of users (publically available)
- Displays disturbance mapping products from a variety of sources
 - NWTCG Spatial Data Warehouse
 - Human disturbance dataset

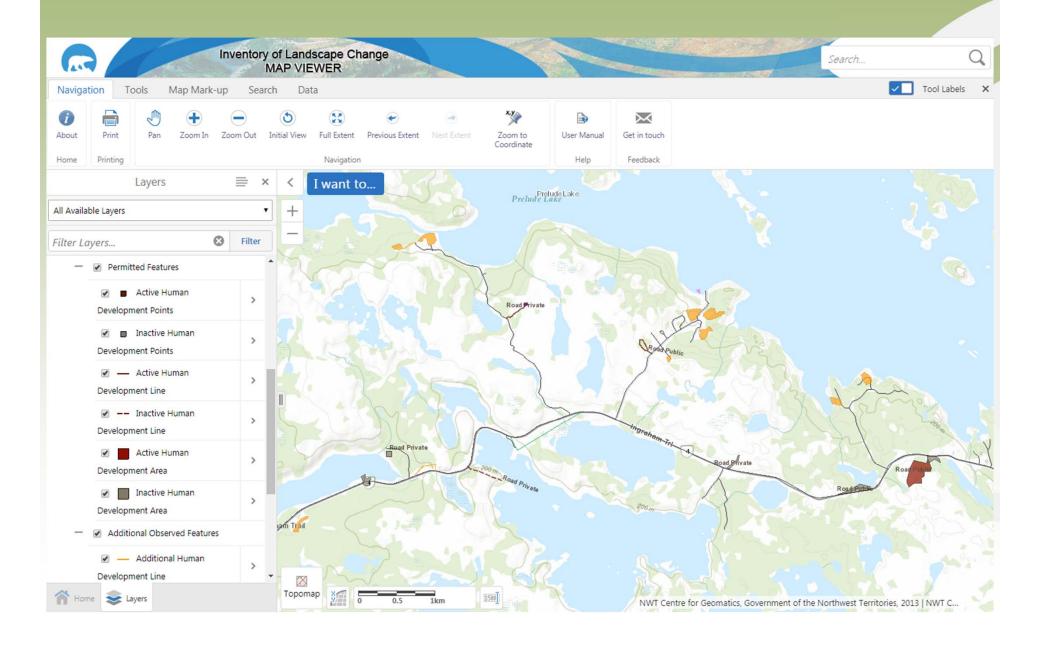


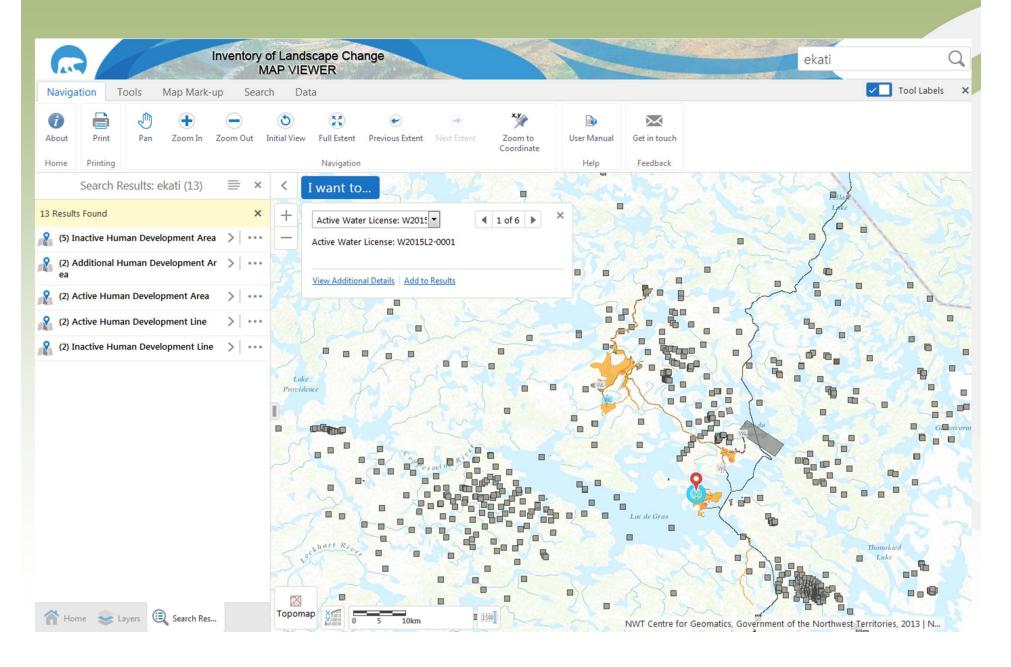
- Built using ArcGIS Server / Geocortex framework using the HTML5 viewer platform
- Familiar, user friendly tools and functionality
- Query tools to filter by date range to view development chronologically
 - Highlights link between environmental changes and human development

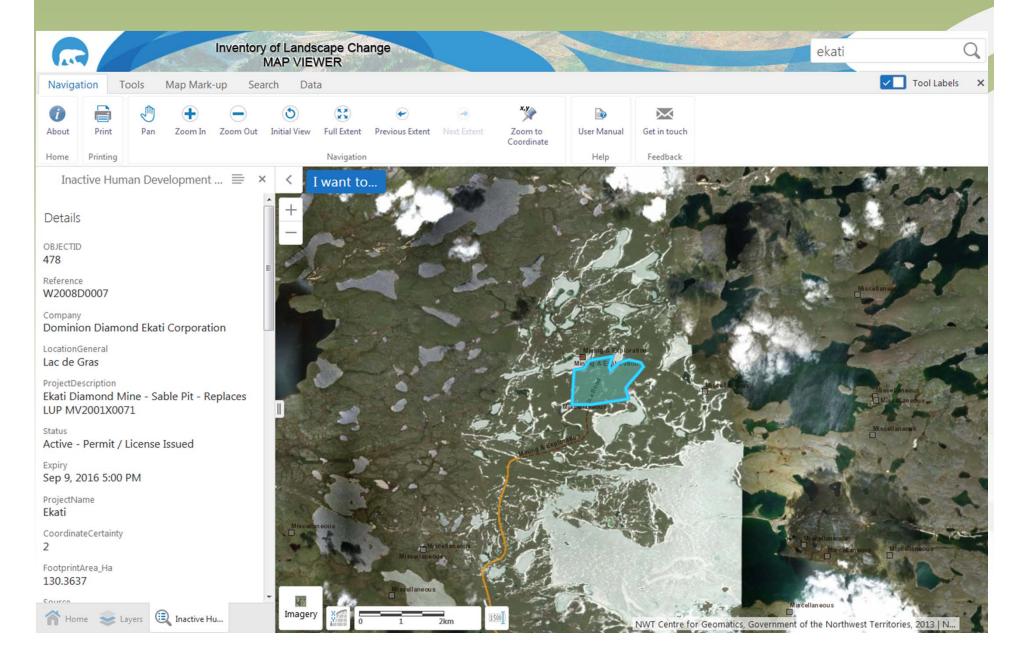
https://www.maps.geomatics.gov.nt.ca/Html5Viewer_PROD/Index.html?viewer=CIMP_ILC_Webmap.ILC_Viewer_

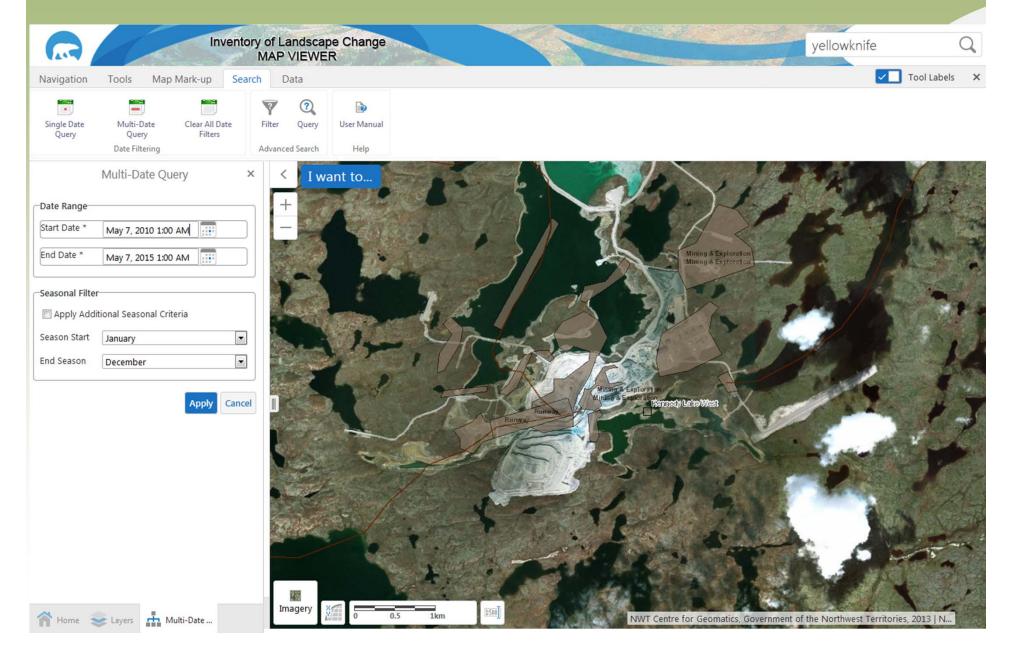












- One stop shop to search and share environmental monitoring and research information
- Launched in 2010, now contains > 4000 records
- Contains information from projects using both scientific and traditional knowledge
- Open to the public



- Based on Geoportal Server
- Metadata database and geographic location of all content, allowing users to search by theme/keyword or location of interest
- Repository for all documents, data files, supporting info
- Enables automated harvesting of records

http://nwtdiscoveryportal.enr.gov.nt.ca/geoportal/catalog/main/home.page





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The NWT Discovery Portal is the most comprehensive online source for environmental monitoring knowledge in the Northwest Territories. It is administered by the NWT Cumulative Impact Monitoring Program. The Portal is a search tool that allows users to access data, metadata and reports. It is also a share tool that allows users to contribute by uploading research and monitoring information. [Learn More...]







Narrow Your Search

NWT Cumulative Impact Monitoring Program

Canadian Cryospheric Information Network

Inventory of Landscape Change

What's New? Access the CIMP Project List by Region 1999-2019 Click here to view the NWT CIMP Annual Report for 2017-18.

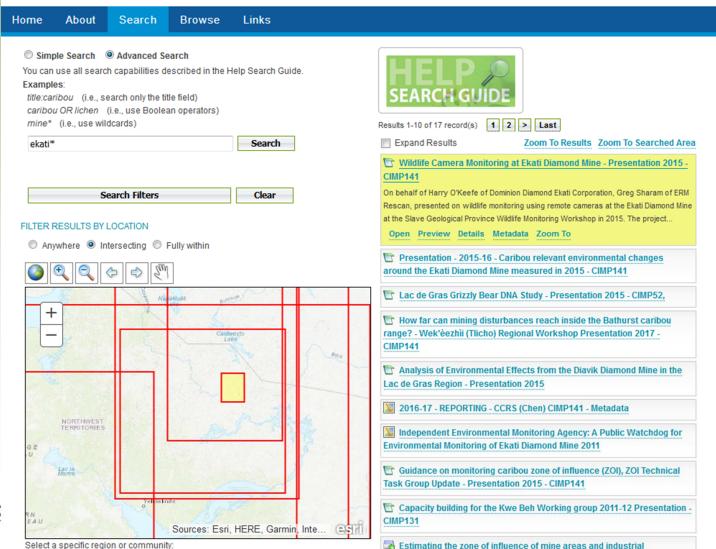




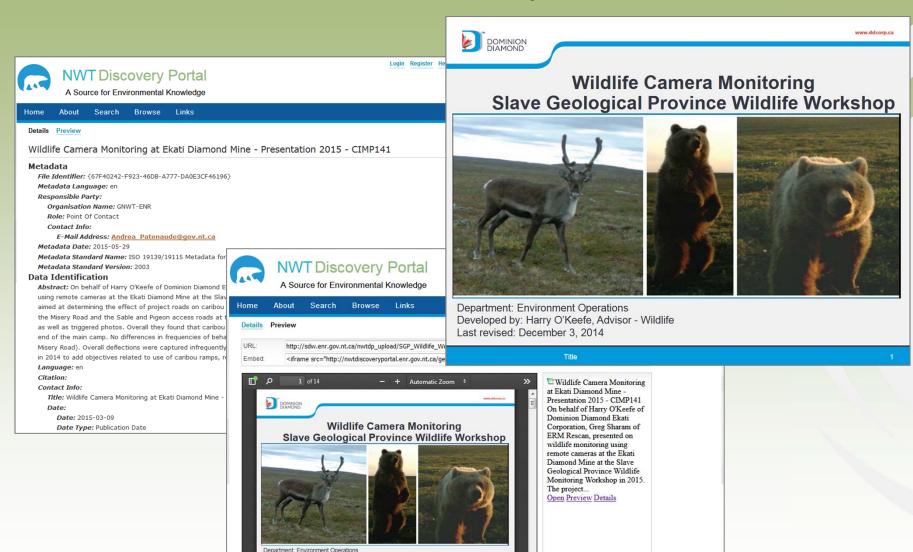




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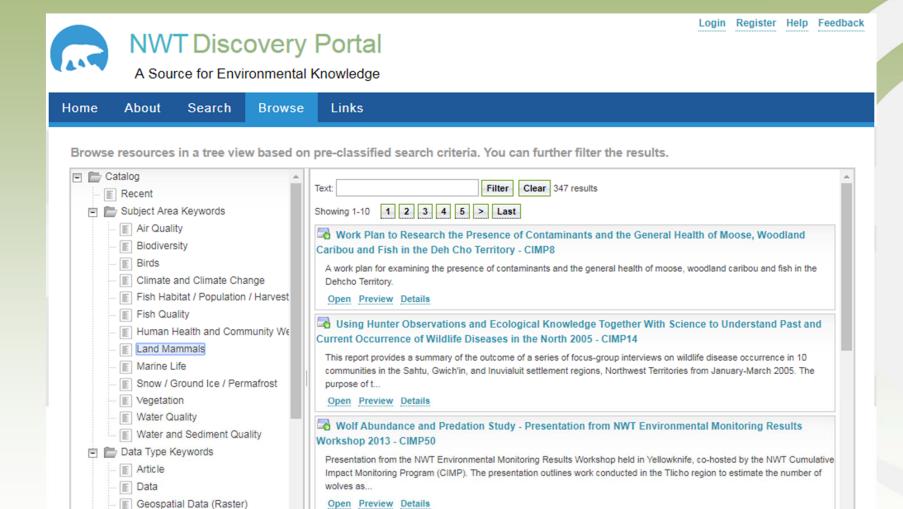




NWT Discovery Portal was built using Geoportal Server. Please read the Disclaimer or Contact Us.

Last revised: December 3, 2014





Seasonal Range Use and Movement Patterns of Boreal Caribou in the Dehcho 2010 - CIMP40

This is a long term project with the key objectives being 1) to document key aspects of the ecology of boreal caribou thus

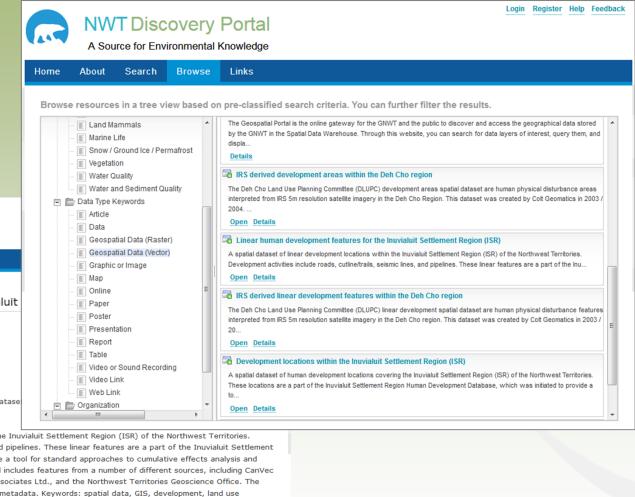
providing baseline information on boreal caribou populations that range through out the Dehcho region, 2) continued population



■ Geospatial Data (Vector)

F Graphic or Image

■ Map





Search

Details

Linear human development features for the Inuvialuit

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Links

File Identifier: {3AC5E610-2B34-4898-BEFA-A875640F88AF}

Metadata Language: en

Responsible Party:

About

Organisation Name: Caslys Consulting Ltd.

Role: Custodian

Metadata Date: 2014-03-28

Metadata Standard Name: Basic ISO 19139/19115 Metadata for Datase

Metadata Standard Version: 2003

Data Identification

Abstract: A spatial dataset of linear development locations within the Inuvialuit Settlement Region (ISR) of the Northwest Territories. Development activities include roads, cutline/trails, seismic lines, and pipelines. These linear features are a part of the Inuvialuit Settlement Region Human Development Database, which was initiated to provide a tool for standard approaches to cumulative effects analysis and land use planning in the NWT. This dataset was created in 2010 and includes features from a number of different sources, including CanVec (Natural Resources Canada), National Energy Board (NEB), Golder Associates Ltd., and the Northwest Territories Geoscience Office. The polygonal dataset is available for download and includes associated metadata. Keywords: spatial data, GIS, development, land use Language: en

Distribution

Transfer Options:

URL: http://sdw.enr.gov.nt.ca/nwtdp_upload/linear_developments_ISR.zip

Function:

Distributor:

Distributor Contact:

Organisation Name: Inventory of Landscape Change

Role: Distributor

NWT Discovery Portal

A Source for Environmental Knowledge

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Northern Programs

NWT CIMP

NWT Protected Areas Strategy

Northern Contaminants Program

Beaufort Regional Environmental Assessment (BREA)

www.enr.gov.nt.ca/programs/nwt-cimp

www.nwtpas.ca

www.science.gc.ca/eic/site/063.nsf/eng/h_7A463DBA.html

www.aadnc-aandc.gc.ca/eng/1310583424493/1310583559732

Databases and Publications

Inuvialuit Settlement Region Database

NWT Species Monitoring Infobase

GNWT Centre for Geomatics

Arctic Borderlands Ecological Knowledge Society

Canadian Forest Service Bookstore

Aurora Research Institute

Arctic Change

Polar Data Catalogue

www.aina.ucalgary.ca/isr/

www.nwtspeciesatrisk.ca/content/search-infobase

www.geomatics.gov.nt.ca/

www.arcticborderlands.org

www.cfs.nrcan.gc.ca/publications/

www.nwtresearch.com

www.arcticchange.org

www.polardata.ca

Water, Renewable Resources, and Planning Organizations

NWT Water Board

Land and Water Boards of the Mackenzie Valley

Mackenzie Valley Land and Water Board

Wek'eezhii Land and Water Board

Sahtu Land and Water Board

Gwich'in Land and Water Board

Gwich'in Renewable Resources Board

Sahtu Renewable Resources Board

Gwich'in Land Use Planning Board

Sahtu Land Use Planning Board

Dehcho Land Use Planning Committee

Wek'eezhii Renewable Resources Board

www.nwtwb.com

www.mvlwb.ca/Registry.aspx

www.mvlwb.com

www.wlwb.ca

www.slwb.com

www.glwb.com

www.grrb.nt.ca

www.srrb.nt.ca www.gwichinplanning.nt.ca

www.sahtulanduseplan.org

www.dehcholands.org/about.htm

www.wrrb.ca



Questions?

Inventory of Landscape Change (ILC) Map Viewer

https://www.maps.geomatics.gov.nt.ca/Html5Viewer PROD/Index.html?viewer=CIMP

ILC Webmap.ILC Viewer

NWT Discovery Portal

http://nwtdiscoveryportal.enr.gov.nt.ca/geoportal/catalog/main/home.page

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