



Non-profit organization

Generate and share high quality, unbiased earth science research and data

Collaboration between governments, communities, Indigenous groups, resource sectors, academia ... improves our collective level of geoscience knowledge

... informs responsible natural resource and investment decisions

.... catalyzes socio-economic opportunities

... stimulates innovation and geoscience technologies









Water

**Understanding Water** 

Identifying New Natural Resource Opportunities

Advancing Science & Innovative Geoscience Technologies

Facilitating Responsible Natural Resource Development

**Enabling Clean Energy** 

Governance, Management & Finance

Public Access & Data Management

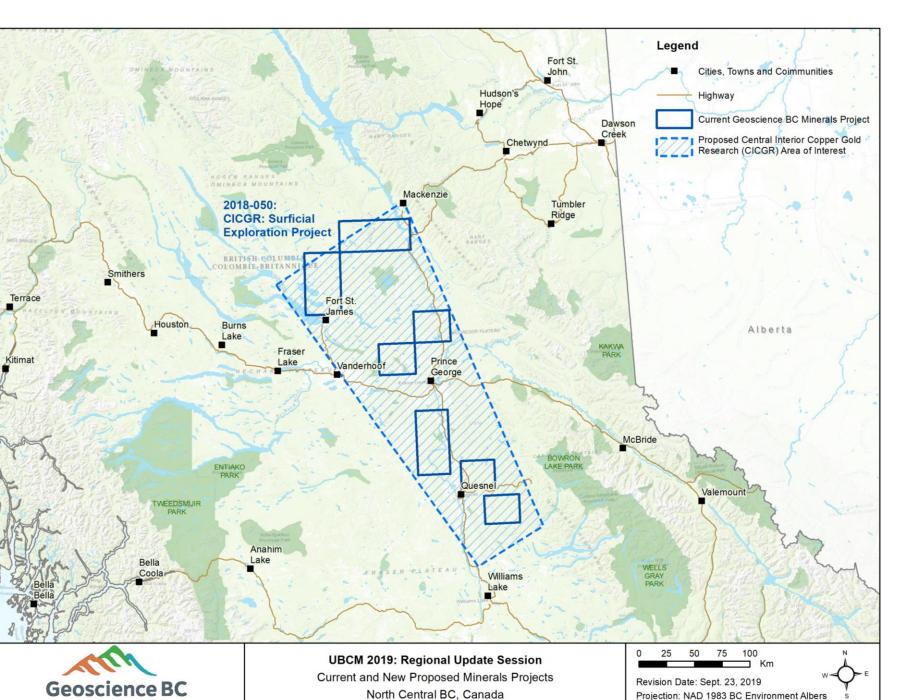
External Relations & Communications



## **Completed & Current Research Projects**

Strategic Research Area	Completed Research Projects	Current Research Projects
Minerals	127	29
Energy - Oil & Gas	24	11
Energy – Geothermal	10	2
Water	25	5
Total	186	47

- Geoscience BC has funded 233 projects, of which:
  - 186 are completed; and
  - 47 are currently underway
- Scientific Project Plan outlines current and future research projects
- Research findings and data available online and summarized in annual Summary of Activities:
  - Minerals; Energy and Water





# Projects in Your Area





# Strategic Objectives Guide Research Project Generation



 Identifying New Natural Resource Opportunities



 Advancing Science & Innovative Geoscience Technologies



- Facilitating Responsible Natural Resource Development
- Enabling Clean Energy
- Understanding Water



# Carbon Mineralization Potential Assessment for BC

- 'Serpentinites' have high potential to react to atmospheric CO<sub>2</sub>, form carbonate minerals, and reduce greenhouse gases (GHGs)
- Mining companies may be able to capture GHGs in their waste materials if mining ultramafic ores
- Project will evaluate BC's potential to capture GHGs





















## **Identifying New Natural Resource Opportunities**

#### Four regional-scale projects for 2019/2020

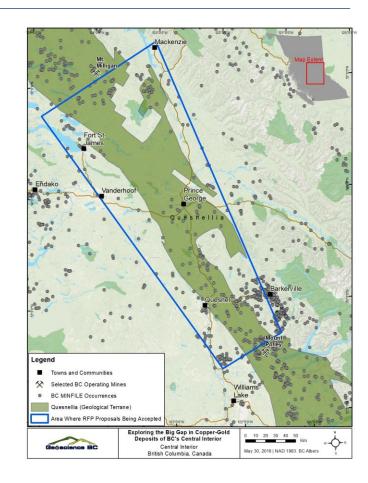
- Central Interior Copper Gold Research Series
  - Till studies, archived till reanalysis, geophysical interpretations, overburden drilling planning
- Vancouver Island North
  - Airborne geophysical surveying in 2019
- Golden Triangle Baseline Geophysical
  - Acquisition of privately held geophysical data in 2019
- Kootenay Region Geoscience Project Generation
  - Project generation and priority setting for geoscience in the Kootenay region





## Central Interior Copper-Gold Research Program

- Multi-year series of projects between Mount Milligan and Mount Polley
  - Examines the mineral potential in the area, as well as the glacial deposits that bury the rocks of interest
  - Follows on from Geoscience BC's QUEST project (supported by NDIT)
- Three separate research projects over 2 years





### Central Interior Copper-Gold Research Program

#### Surficial Exploration Components: \$1.1 million, 3-years

- A framework that can be used to trace till samples and geochemical anomalies back to their source, which may help to identify potential mineral deposits.
- New data: thickness, distribution and characteristics of materials found at surface where till cover rocks that may host mineral deposits
  - 2019: surficial mapping through analysis of aerial photographs over specific areas within project boundary
  - 2019/2020 collection and analysis of new and previously-collected till samples.
  - 2020 potential drilling program



# Smithers Exploration Group Restoration of the Collection of Cordilleran Rock Suites

- 2,000-piece collection of rock samples from Northwest and Northcentral BC
  - Used by students, local communities, geologists and prospectors
- Adding new samples to collection
- Promoting the collection at conferences
- Preserving collection digitally and physically





Gavin C. Dirom | dirom@geosciencebc.com

Carlos Salas | salas@geosciencebc.com

Christa Pellett | pellett@geosciencebc.com

Richard Truman | truman@geosciencebc.com