



Project Update Northwest

September 24, 2019



... improves our collective level of geoscience knowledge

... informs responsible natural resource and investment decisions

.... catalyzes socio-economic opportunities

... stimulates innovation and geoscience technologies

Non-profit organization

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

Collaboration between governments, communities, Indigenous groups, resource sectors, academia









Identifying New Natural Resource Opportunities

Understanding Water

Advancing Science & Innovative Geoscience Technologies

Facilitating Responsible Natural Resource Development

Enabling Clean Energy

Governance, Management	Public Access &	External Relations
& Finance	Data Management	& Communications

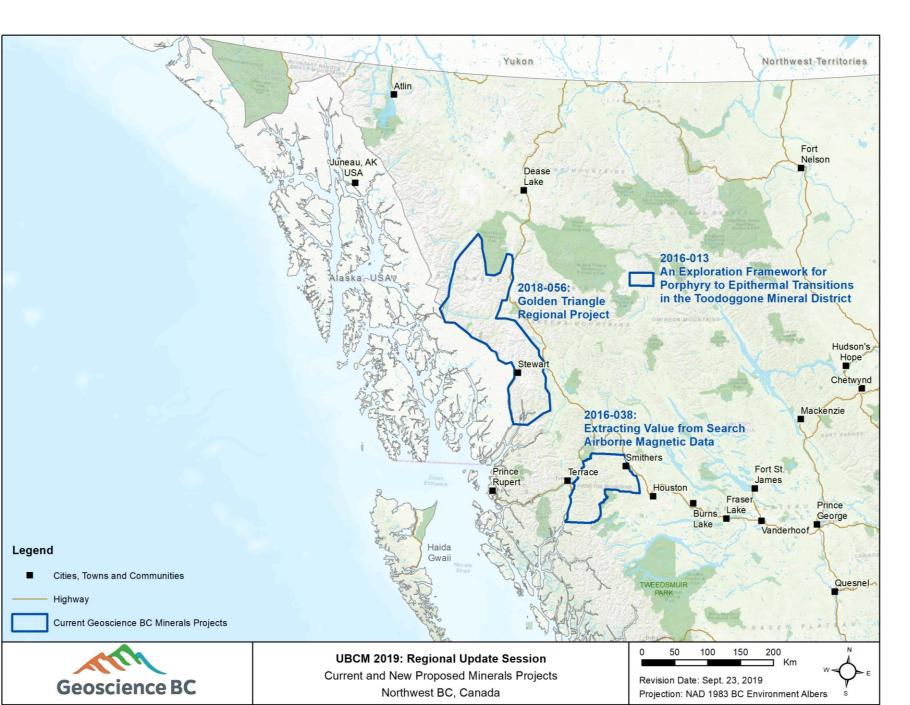


Geoscience BC Completed & Current Research Projects

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



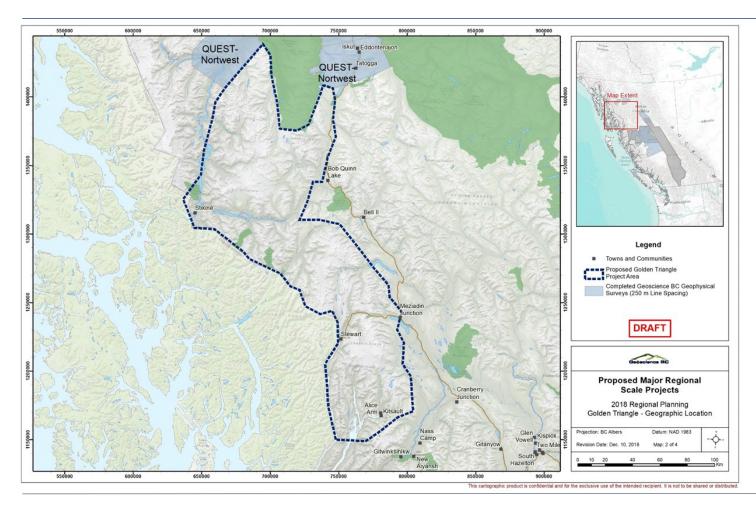


Strategic Objectives Guide Research Project Generation

- Identifying New Natural Resource
 Opportunities
- Advancing Science & Innovative Geoscience Technologies
- Facilitating Responsible Natural Resource Development
- Enabling Clean Energy
- Understanding Water



Golden Triangle Baseline Geophysical Project



This year:

- Approach industry for existing data
- Evaluate and purchase data
- Plan infill survey

Next year and beyond:

- Infill survey
- Opportunity to coordinate and collaborate with BC Geological Survey



Extracting Geological Value from Search Airborne Magnetic Data, West Central BC

- Improve understanding of the geology and mineral potential of the Skeena Arch area (GBC Search Phase I)
- Collaboration with UBC's Mineral Deposit Research Unit (MDRU) and the provincial government British Columbia Geological Survey
 - Field team utilized Search Phase I survey magnetic data and archive data collected by satellites to support mapping.





An Exploration Framework for Porphyry to Epithermal Transitions in the Toodoggone Mineral District

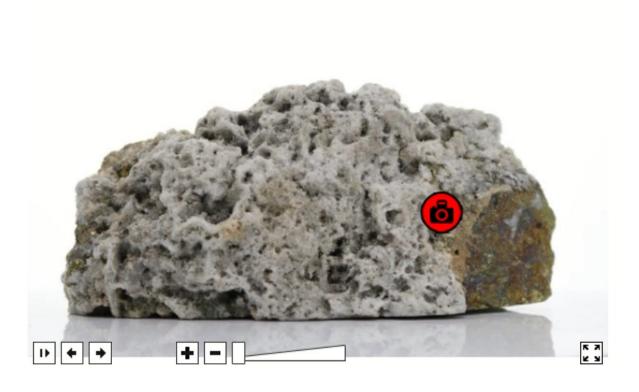
- Toodoggone River area hosts several significant mineral deposits
 - Includes Centerra Gold's Kemess copper and gold mine.
- Exploration activities have mostly focused on specific styles of mineralization and on areas where high-grade ore is found.
- Project has evaluated the range of deposits and occurrences in this district.





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





Access to the Mining Heritage of BC: Bringing Geological Collections to the Masses

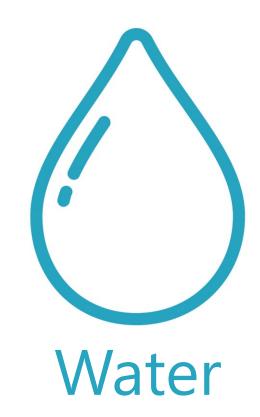
- Below BC non-profit society on a quest to bring geology and the broader earth sciences alive for the public through education and a variety of media.
- Virtual museum of rock, mineral and fossil samples from sites and collections across southern and northwestern BC.
- Includes online 360-degree 'field trips' at key locations across





Upcoming: Alaska Transboundary Water Quality Monitoring

- British Columbia and Alaska governments have initiated a Transboundary Waters Monitoring Program in northwestern BC.
- Geoscience BC has been invited to contribute to their monitoring program
 - seeking input from industry, communities and governments on the scope and scale of the potential water research that it may undertake in this region in the future.





Tahltan Collaboration Agreement

- Collaboration Agreement signed May 2019
- Sets out principles for working together in Territory
- Potential individual project agreements to follow
- Geoscience workshop Dease Lake August 2019
 - with BC Geological Survey, Geological Survey of Canada and Smithers Exploration Group





Carbon Mineralization Potential Assessment for BC

- 'Serpentinites' have high potential to react to atmospheric CO₂, 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

More information at 1 pm!





Gavin C. Dirom | <u>dirom@geosciencebc.com</u> Carlos Salas | <u>salas@geosciencebc.com</u> Christa Pellett | <u>pellett@geosciencebc.com</u> Richard Truman | <u>truman@geosciencebc.com</u>