



**WCS**  
**CANADA**

# The Ontario Mineral Tracker

---

Meg Southee & Connie O'Connor  
Ontario Northern Boreal Program

Northern Ontario First Nations Environment  
Conference (NOFNEC) – October 3, 2024



# *What is the Ontario Mineral Tracker?*

---

*Weekly maps for all new proposed mineral exploration permits*

We are an environmental non-profit bringing data together from separate websites to:

- Show where new mineral exploration is being proposed
- Make it easier to submit comments to Ontario government to oppose mining activity
- Increase participation in the existing government framework

Mineral  
exploration  
permits are the  
first stage of the  
government  
decision-making  
process where you  
can make your  
voice heard!

I want to be part of decisions about  
new mining activity!

If only there were a tool to know  
where mineral exploration was  
happening ...



Created using Microsoft Copilot Image Generator.





# Permit Details

Proponent: Romios Gold Resources Inc.  
Project Name: Lundmark-Akow Lake  
Exploration Permit Number: PR-24-000169  
Permit Area: 56.66 sq. km

Proposed Mineral Exploration Activities:  
Airborne Geophysical Survey, Exploration Camps,  
Geophysical Survey Requiring Generator Type, Ground  
Geophysical Surveys without a generator, Line Cutting,  
Mechanized Drilling, Trails

Closest Communities: Kingfisher (49.1 km), North  
Caribou Lake (50.9 km), Wunnumin (80.1 km),  
Muskrat Dam Lake (98.7 km), Wawakapewin (112.5  
km)

Forest Management Unit: None  
Watershed: Severn River  
Major River Basin: Severn  
Downstream Communities: North Caribou Lake,  
Muskrat Dam, Bearskin Lake, Fort Severn

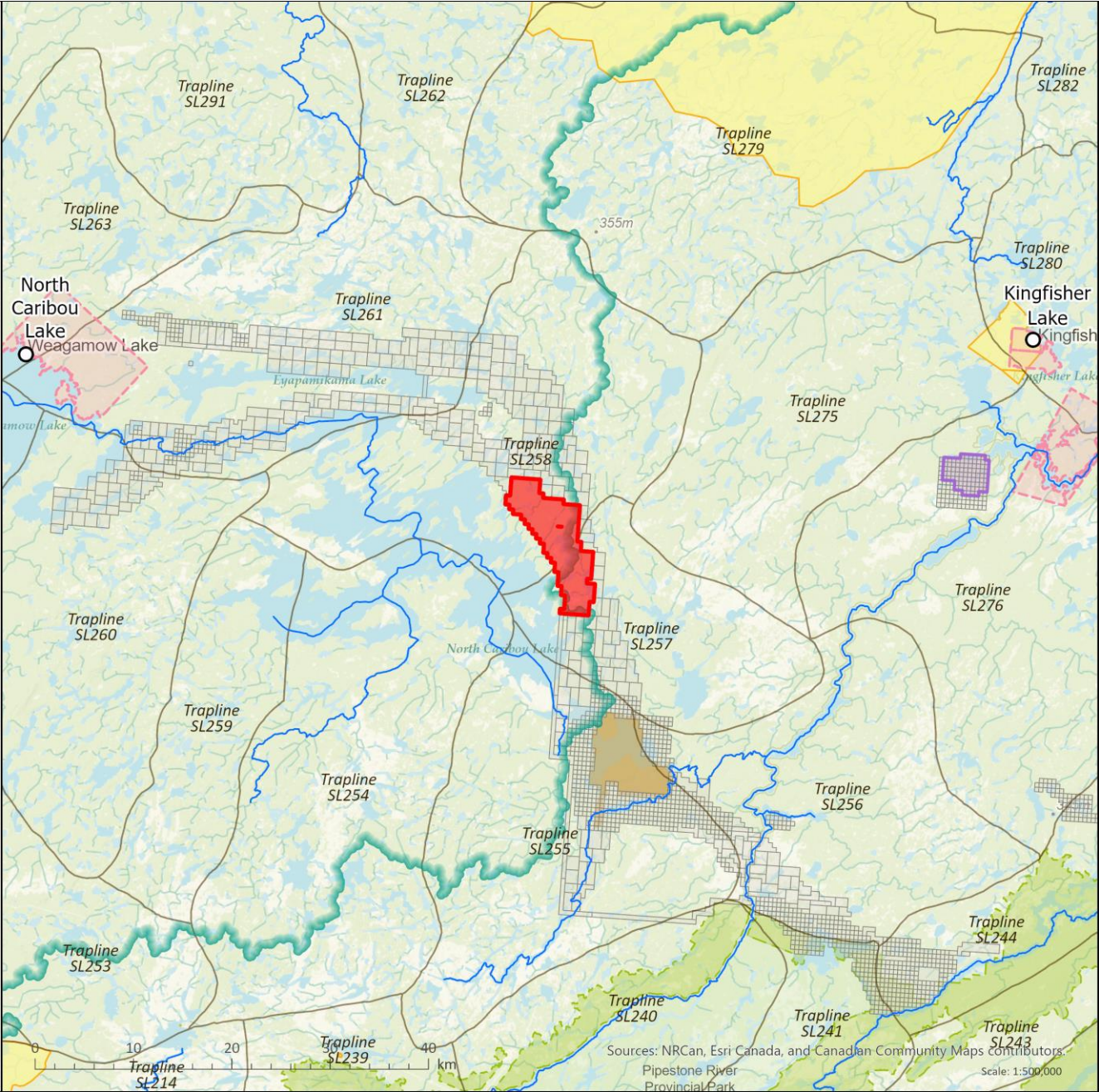
Environmental Registry of Ontario (ERO) Details  
ERO Notice: 019-9058  
Comment Deadline: September 13, 2024

Ministry Contact: Cristina Colantonio  
Phone Number: 705-465-1165  
Email: cristina.colantonio@ontario.ca

## ARE YOU CONCERNED ABOUT THIS PROPOSAL?

If so, you can submit a comment on the Environmental Registry of Ontario before the comment deadline or contact the ministry representative directly.

This map was created by the Wildlife Conservation Society Canada to: promote awareness about proposed mineral exploration activities, and provide land users and rightsholders with more information about what is happening in their area and/or traditional territory.



# Overview Map



## Legend

- \*NEW\* Mineral Exploration Permit Proposal
- Proposed Mineral Exploration Permit
- Active Mineral Exploration Permit (3 years)
- Mining Claim (2 years)
- Mining Lease (21 years)
- First Nation Community
- Indian Reserve
- Trapline
- Area Withdrawn from Mining
- Land Notice (Title Claim / Potential Protected Area)
- Major River Basin

This product is for informational purposes and is not suitable for legal, surveying or navigation purposes. Every effort is made to ensure this map is free of errors but there is no guarantee this map is spatially or temporally accurate or complete. This map is provided without any warranty of any kind whatsoever.





# Ontario Mineral Tracker Facebook Page

- Can share posts with others in your community
- Can expand maps full screen or download them onto computer/phone
- Hyperlinks to Environmental Registry of Ontario to easily submit a comment
- New Facebook posts every week

<https://www.facebook.com/MineralTrackerON/>



**Ontario Mineral Tracker**

149 likes • 253 followers



See dashboard

Edit

Advertise



**Ontario Mineral Tracker**

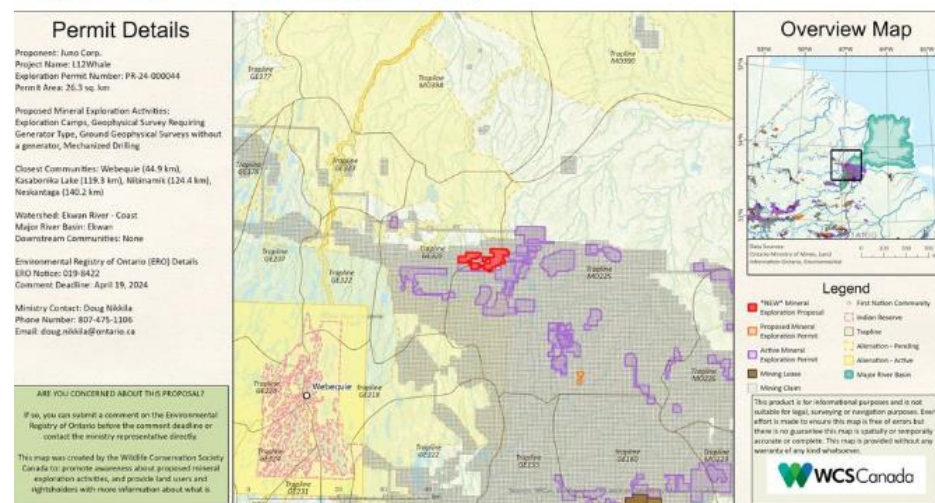
Published by Mining Claims Tracker • March 21 at 3:36 PM •

WEBEQUIE (44.9 KM). Juno Corp. is requesting a mineral exploration permit (PR-24-000044) in the EKWAN RIVER watershed. There are no downstream First Nation communities. If you are concerned about mineral exploration in this area, provide a comment on the Environmental Registry of Ontario (ERO Notice: 019-8422) before April 19, 2024 or contact the ministry representative (Doug Nikkila, [doug.nikkila@ontario.ca](mailto:doug.nikkila@ontario.ca)) directly.

<https://ero.ontario.ca/notice/019-8422>

The Ontario Mineral Tracker was created by [Wildlife Conservation Society Canada](#) to make it easier for people to know about mineral exploration that is happening – and to make it easier for people to make their voice heard if mining activity is not wanted. We also have other resources about ways to oppose unwanted mining activity:

<https://wcsringoffire.ca/.../MiningActionSummary...>



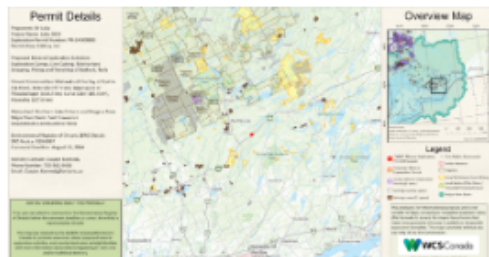
# Weekly newsletter on email [[sign up here](#)]

## PERMITS STILL OPEN FOR COMMENT

There are **23** existing permits that are still open for comment.

You can find more details about each of these permits on the [Ontario Mineral Tracker Facebook page](#) and in past newsletters.

Click on the maps to enlarge the image. You can save a copy to your device.



### MOHAWKS OF THE BAY OF QUINTE (54.8 KM).

Provide a comment on the Environmental Registry of Ontario (ERO Notice: 019-8967) before **August 23, 2024** or contact the ministry representative (Clayton Kennedy, [Clayton.Kennedy@ontario.ca](mailto:Clayton.Kennedy@ontario.ca)) directly.

[ERO Notice - Submit a Comment](#)

## NEW PROPOSED PERMITS

There are **4** new proposed permits this week.

Click on the maps to enlarge the image. You can save a copy to your device.



### KINGFISHER (49.1 KM).

Romios Gold Resources Inc. is requesting a mineral exploration permit (PR-24-000169) in the SEVERN RIVER watershed. The downstream First Nation communities are NORTH CARIBOU LAKE, MUSKRAT DAM LAKE, BEARSKIN LAKE and FORT SEVERN. If you are concerned about mineral exploration in this area, provide a comment on the Environmental Registry of Ontario (ERO Notice: 019-9058) before **September 13, 2024** or contact the ministry representative (Cristina Colantonio, [cristina.colantonio@ontario.ca](mailto:cristina.colantonio@ontario.ca)) directly.

[ERO Notice - Submit a Comment](#)



# *Why did we build the Ontario Mineral Tracker?*

---

*Weekly maps for all new proposed  
mineral exploration permits*

We are an environmental non-profit bringing data together from separate websites to:

- Show where new mineral exploration is being proposed
- Make it easier to submit comments to Ontario government to oppose mining activity
- Increase participation in the existing government framework





**Northern  
Boreal  
Mountains**



**Western  
Arctic**



**Ontario  
Northern  
Boreal**



**Western  
Bats**



## NATIONAL INITIATIVES



**Key  
Biodiversity  
Areas**



**Biodiversity**



**Indigenous  
Communities &  
Conservation**



**Forests,  
Peatlands &  
Climate Change**



**One Health**



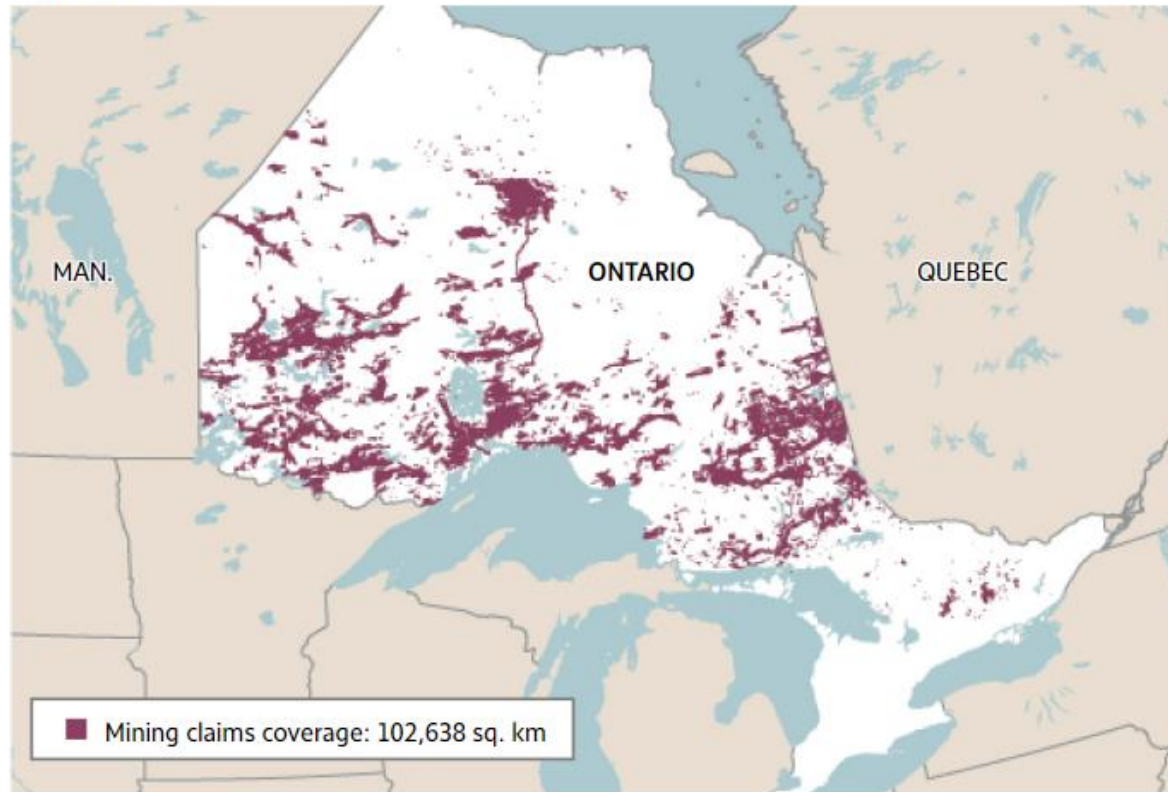
**Next Generation of  
Conservation  
Scientists**



# Increasing mining claims in Ontario

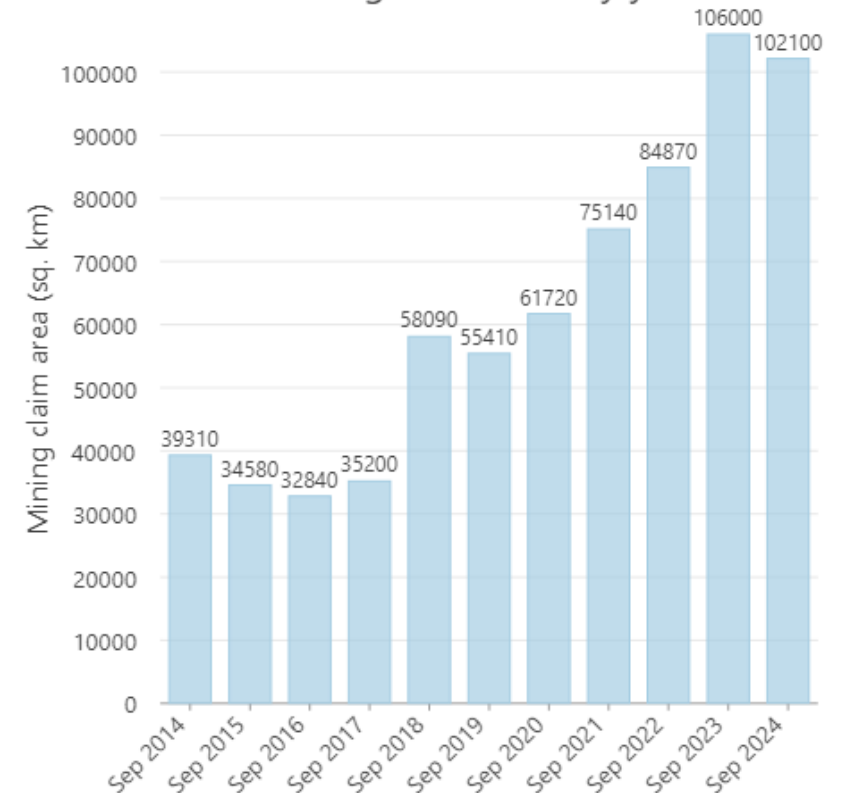
## Ontario mining claims

June 2024



THE GLOBE AND MAIL, SOURCE: WILDLIFE CONSERVATION SOCIETY CANADA

## Total mining claim area by year



Wildlife Conservation Society Canada, 2024. Source Data: Mining Land Administration System, Ontario Ministry of Mines.

# Legal action against mining claims

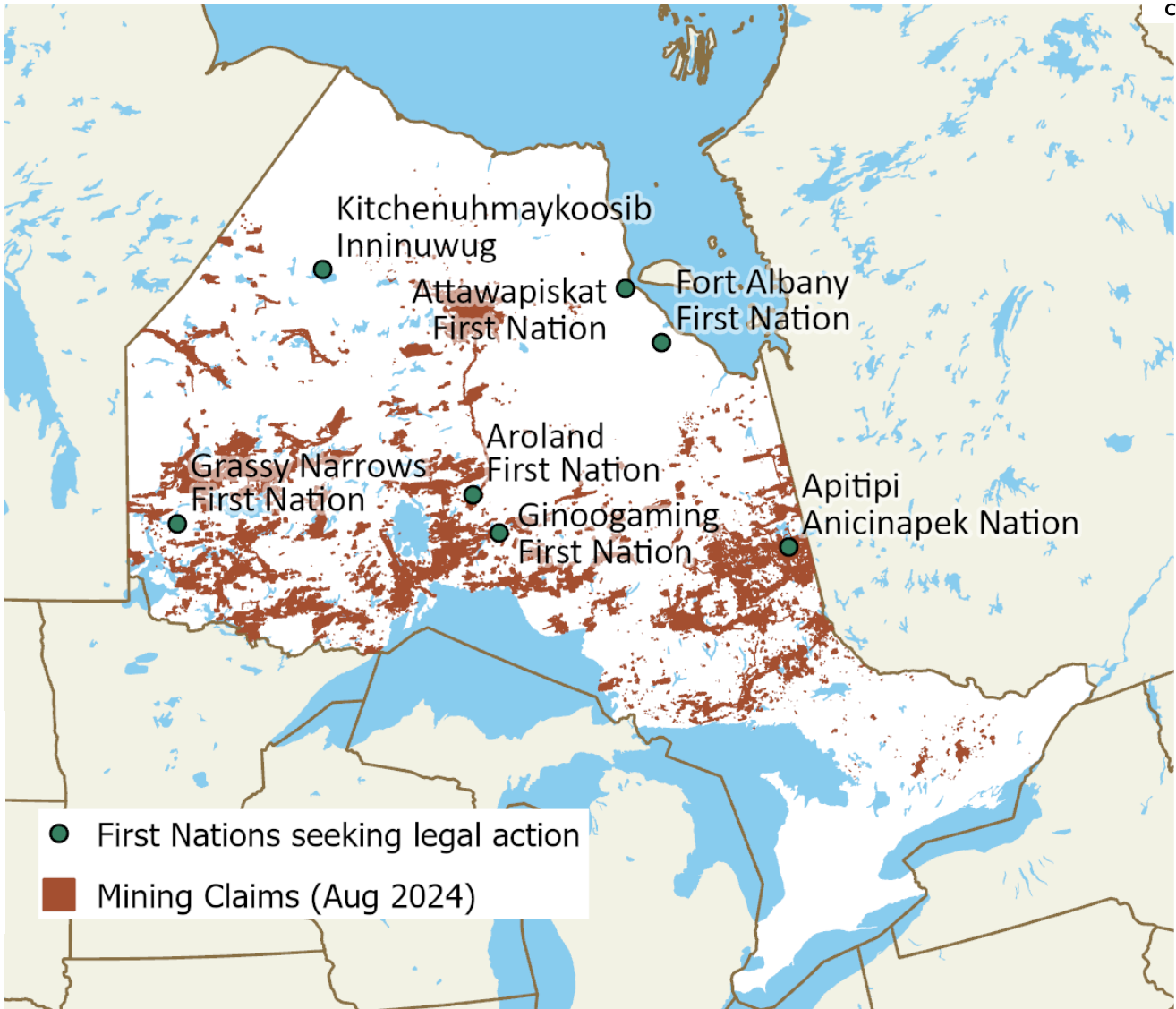
## First Nation court action against Ontario could invalidate all mining claims in the province

NIALl MCGEE > MINING REPORTER  
PUBLISHED JULY 12, 2024

## 6 First Nations challenge Ontario's Mining Act, a month after similar legal action by Grassy Narrows

Separate court applications argue the provincial act breaches treaty, Charter rights

CBC News · Posted: Aug 12, 2024 2:37 PM EDT | Last Updated: August 12



Wildlife Conservation Society Canada. Source data: Operational Cell Claims, Ontario Ministry of Mines.



# The mining sequence in Ontario





# *How did we build the Ontario Mineral Tracker?*

---

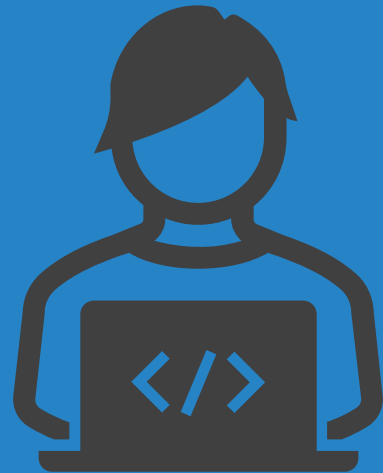
*Using Python scripting to pull  
government data into informative  
and accessible maps*

Workflow automation





## Ontario Mineral Tracker: How it works

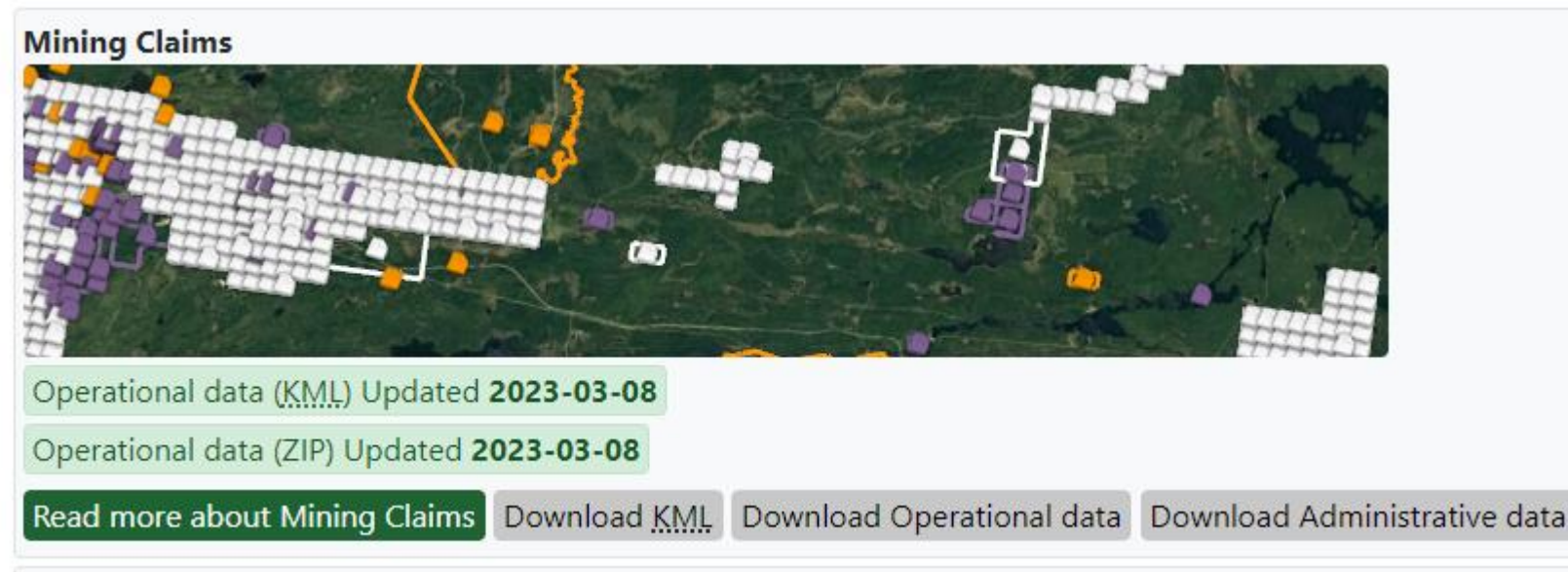


### **Python scripts to:**

1. Download latest mining data
2. Add data from government websites
  - Mining Lands Administration System
  - Environmental Registry of Ontario
3. Run GIS analysis
4. Generate output maps

# Download latest mining datasets

- Access OGSEarth (an Ontario government website)
- Download most recent mining datasets
- Add new records and update existing records in local database



Source: <https://www.geologyontario.mndm.gov.on.ca/ogsearth.html>



# Mining Lands Administration System (MLAS)



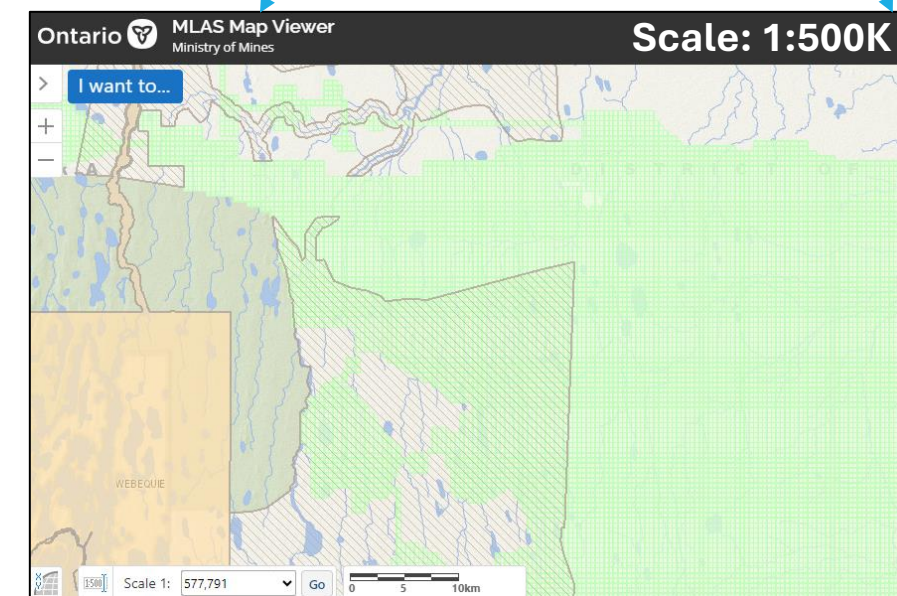
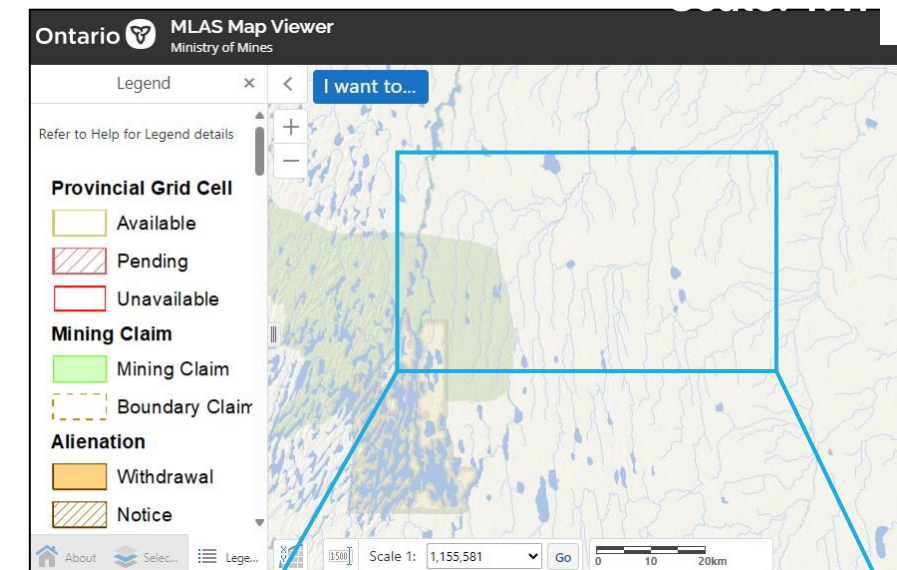
Online system for registering mining claims and managing public lands for mining purposes



Claims are only visible when zoomed in below 1:500K



No overall landscape picture of where the claims are located!



# Access data in MLAS tables

- Use computer code to access the records on the MLAS public viewer
- Add information from the online tables into local database

Instrument Number	Instrument Type	Instrument Status	Activity Type	Township/Area	Tenure Holder(s)	Issue Date	Expiry Date
<a href="#">PR-21-000083</a>	Permit	Active	Airborne Geophysical Survey (AA), Geophysical Survey Requiring Generator Type, Ground Geophysical Surveys without a generator (GS), Line Cutting (>1.5m width), Mechanized Drilling (Assembled Weight >150kg), Trails (TS)	MCVICAR LAKE AREA	(10003437) EMX Properties (Canada) Inc., (10004221) Solstice Gold Corp.	2021-06-16	2024-06-15

<https://www.mlas.mndm.gov.on.ca/mlas/search/searchIndex.html#/search/searchInstrument?earlyExplorationNumbers=PR-21-000083>

# Environmental Registry of Ontario (ERO)

- Government portal for decisions that impact the environment
  - **This is where new mineral exploration permits proposals and decisions are posted**
  - **30-day window for public input**
- Poor spatial data
  - Mining claims only listed by claim number
  - Map only shows pinpoint and no other features

Ontario

Environmental Registry of Ontario

Home Search Map About

Register Log in Français

Juno Corp

Instrument type: Mineral exploration permit

ERO number

019-8422

Ministry reference number

PR-24-000044

Notice type

Instrument

Act

Mining Act, R.S.O. 1990

Posted by

Ministry of Mines

Notice stage

Proposal

Proposal posted

March 20, 2024

Comment period

March 20, 2024 - April 19, 2024 (30 days) Open

Last updated

March 20, 2024

Site location details

The early exploration activities are located approximately 530 kilometres North of Thunder Bay, Ontario, in BMA 533 864, BMA 533 863, and BMA 532 864, District of Thunder Bay, NW Region.

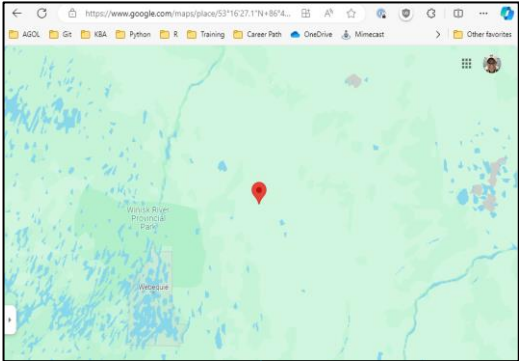
Claim numbers instructions: To view individual claims on a map please use the [Mining Lands Administration System](#). Click on "I want to..." and select "Find a claim" to search by claim numbers or "Find a township" to search by township.

Claim numbers: 115407, 115431, 115432, 115541, 115544, 115552, 115588, 124927, 133375, 141324, 141390, 151320, 151325, 151326, 153535, 153536, 153563, 154164, 154171, 154172, 154173, 170108, 170109, 170170, 170740, 170741, 170746, 199368, 199391, 199442, 199443, 199493, 199494, 199495, 206872, 206892, 207436, 207516, 218979, 218980, 219548, 219620, 219621, 226262, 226340, 226341, 226902, 226903, 226905, 266036, 266105, 266109, 272865, 273389, 273472, 273535, 273541, 273542, 274076, 274077, 285511, 285534, 285597, 286173, 286174, 286175, 286218, 304054, 304056, 319976, 320000, 320558, 320610, 322127, 322765, 333945, 333975, 334204, 334266, 334275, 334276, 334306, 546747, 546748, 546750, 546751, 546752, 546753, 546754, 546755, 546756, 546757, 546758, 546759, 546761, 546762, 546763, 546764, 546765, 546766, 546767, 546768, 546770, 546771, 546772, 546773, 546774, 546775, 546776, 551891, 551911, 551912, 551965, 551966, 551967, 551968, 551969, 551978, 551979, 551980, 551981, 551982, 551991, 551992, 551993, 551994, 551999, 552000, 552001, 552002, 552005, 552006, 552018, 552025, 552027, 552039

Site location map

The location pin reflects the approximate area where environmental activity is taking place.

[View this location on a map](#)





# Access ERO data records

- Use computer code to search for new mineral exploration permit proposals
- Add information about the proposals to local database

<https://ero.ontario.ca/search?search=PR-21-000083>

> automated Python code interaction >

<https://ero.ontario.ca/notice/019-3407>

## Filter results by

Date range	+
Comment period	+
Notice type	+
Notice stage	+
Posted by	+
Act	+
Instrument type	+

## 1 results

Displaying notice 1 - 1 of 1

### Ms. Lori Paslawski

Instrument type: Mineral exploration permit

ERO number	019-3407
Notice type	Instrument
Notice stage	Decision
Decision posted	June 17, 2021
Proposal posted	March 24, 2021
Comment period	March 24, 2021 - April 23, 2021 (30 days) Closed
Last updated	June 17, 2021
The Director of Exploration has made a decision on the EMX Properties (Canada) Ltd., McVicar F Project exploration permit application PR-21-000083 to undertake early exploration activities. The location of the activities is approximately 60 kilometres SW of Cat Lake First Nation Ontario	

## Related files



PR-21-000083-McVicarFProject-Permit.pdf  
pdf 2.77 MB

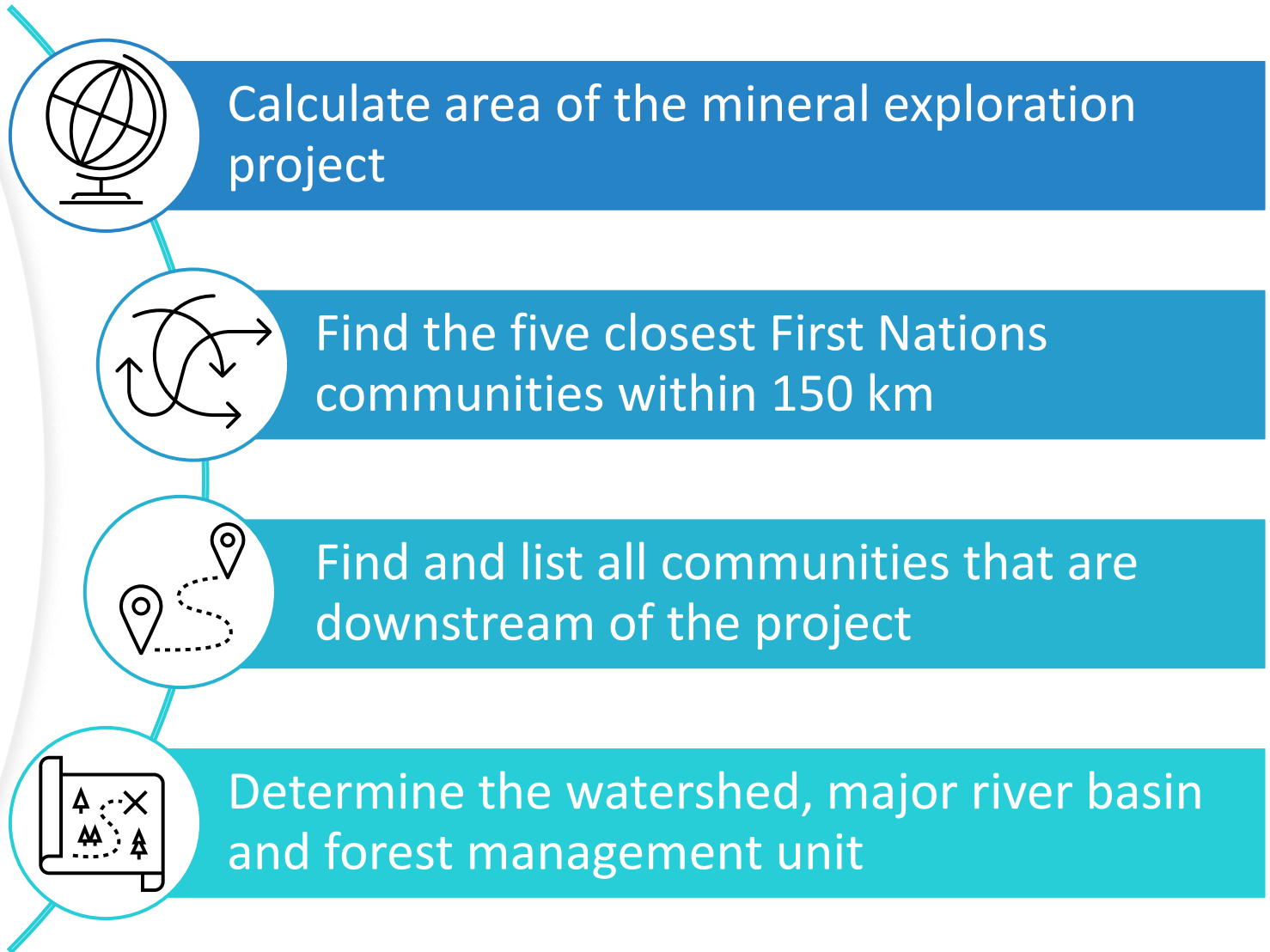
## Contact

Andrew Kane

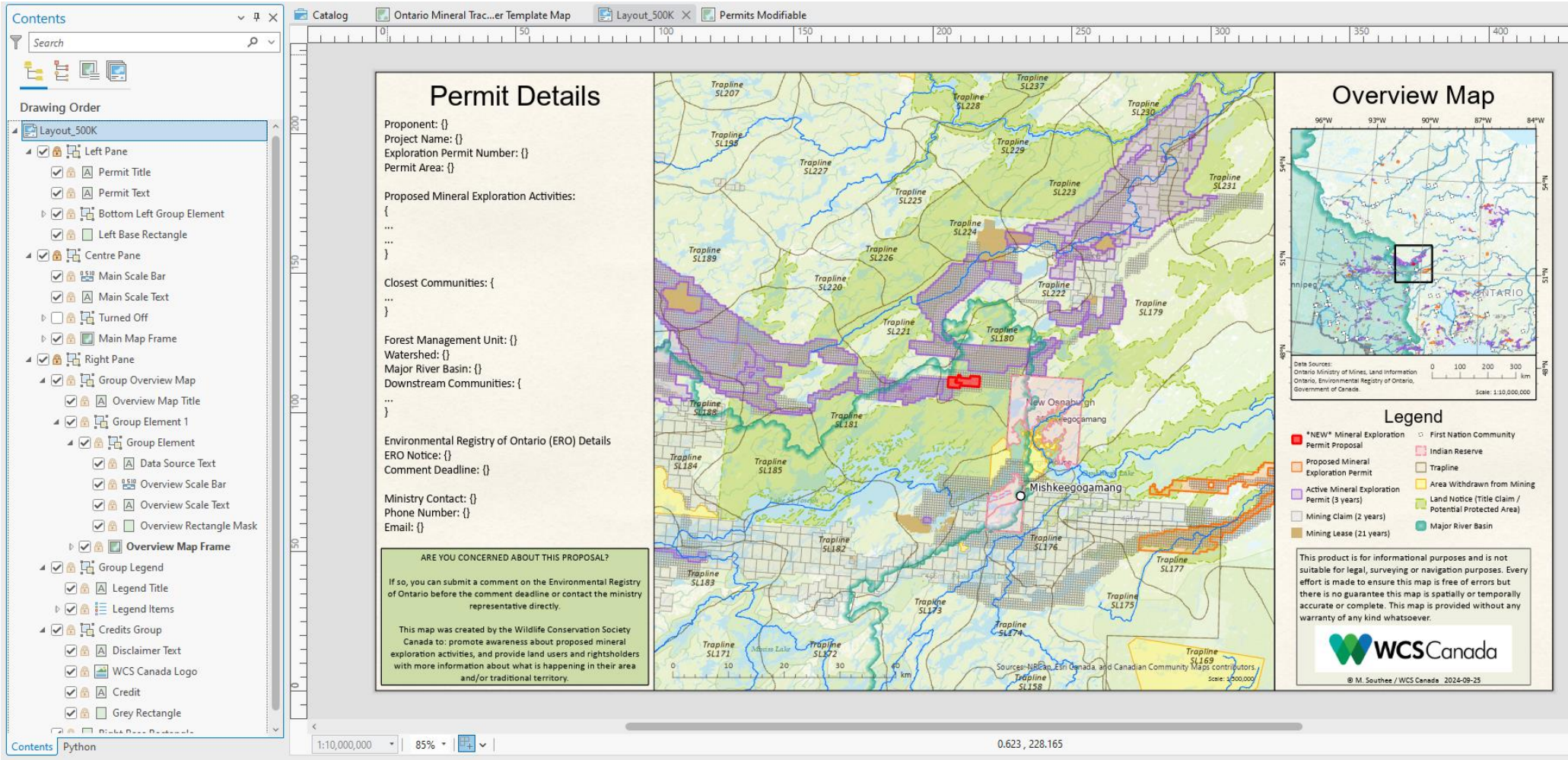
807-475-1518

[andrew.kane@ontario.ca](mailto:andrew.kane@ontario.ca)

# Run GIS analysis and perform spatial calculations



# Create output maps for each proposed project



- Reusable ArcGIS Pro Template
- Populate text content for each project
- Change the position of the maps to focus on each new project



# Permit Details

Proponent: Romios Gold Resources Inc.  
Project Name: Lundmark-Akow Lake  
Exploration Permit Number: PR-24-000169  
Permit Area: 56.66 sq. km

Proposed Mineral Exploration Activities:  
Airborne Geophysical Survey, Exploration Camps,  
Geophysical Survey Requiring Generator Type, Ground  
Geophysical Surveys without a generator, Line Cutting,  
Mechanized Drilling, Trails

Closest Communities: Kingfisher (49.1 km), North  
Caribou Lake (50.9 km), Wunnumin (80.1 km),  
Muskrat Dam Lake (98.7 km), Wawakapewin (112.5  
km)

Forest Management Unit: None  
Watershed: Severn River  
Major River Basin: Severn  
Downstream Communities: North Caribou Lake,  
Muskrat Dam, Bearskin Lake, Fort Severn

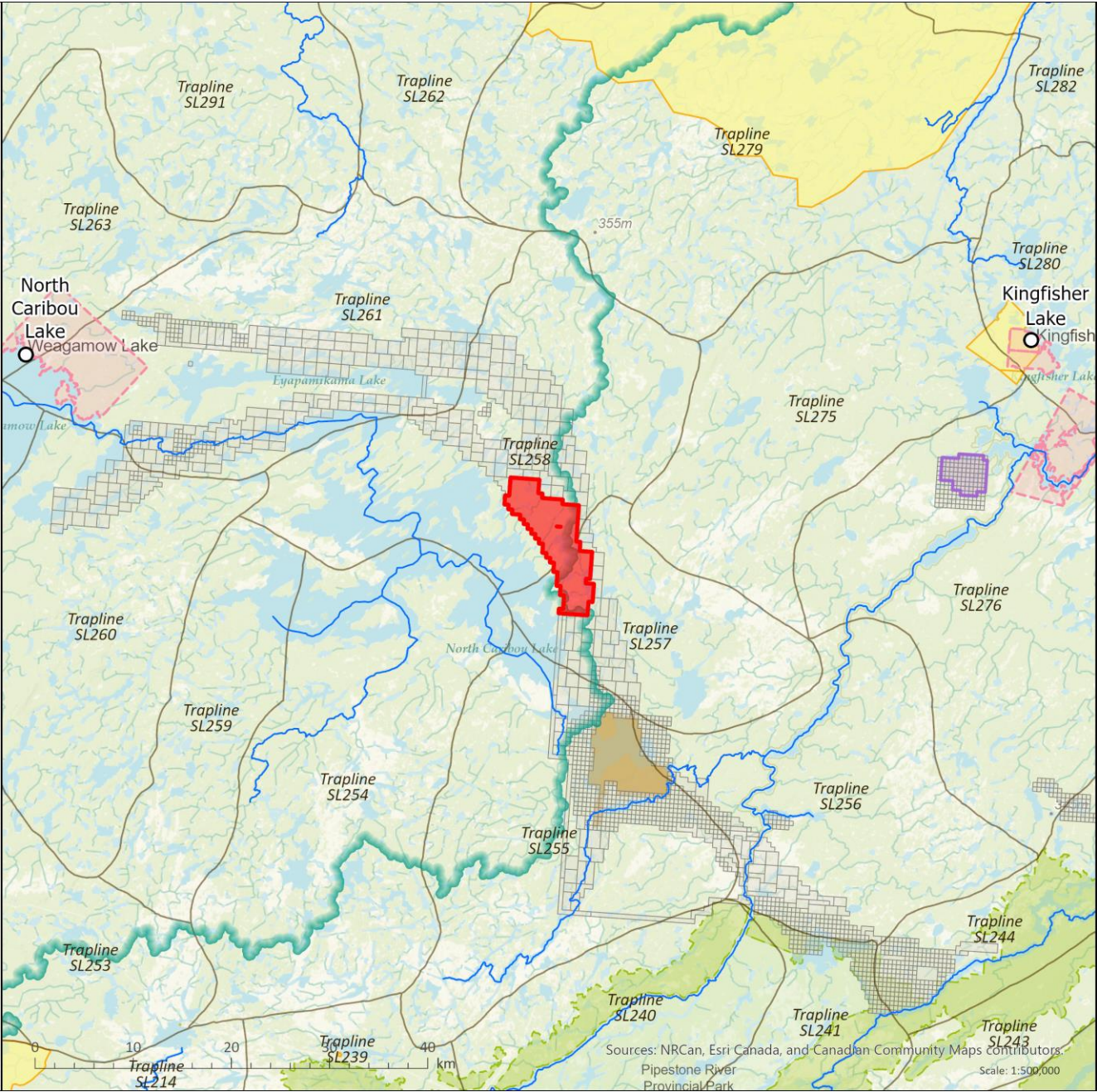
Environmental Registry of Ontario (ERO) Details  
ERO Notice: 019-9058  
Comment Deadline: September 13, 2024

Ministry Contact: Cristina Colantonio  
Phone Number: 705-465-1165  
Email: cristina.colantonio@ontario.ca

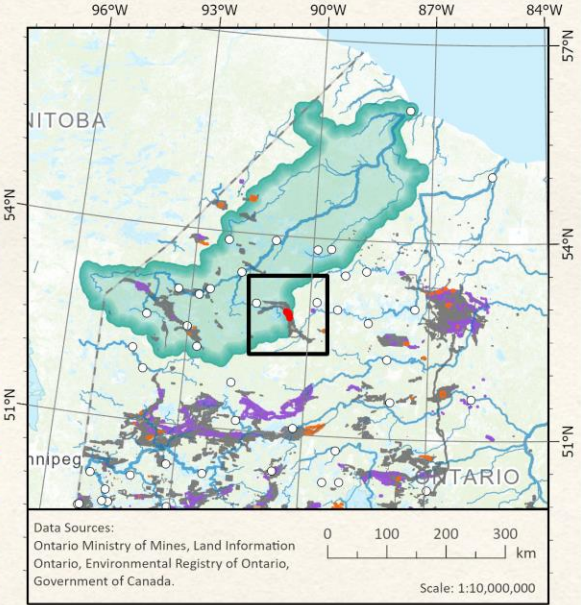
ARE YOU CONCERNED ABOUT THIS PROPOSAL?

If so, you can submit a comment on the Environmental Registry of Ontario before the comment deadline or contact the ministry representative directly.

This map was created by the Wildlife Conservation Society Canada to: promote awareness about proposed mineral exploration activities, and provide land users and rightsholders with more information about what is happening in their area and/or traditional territory.



# Overview Map



## Legend

- \*NEW\* Mineral Exploration Permit Proposal

Proposed Mineral Exploration Permit

Active Mineral Exploration Permit (3 years)

Mining Claim (2 years)

Mining Lease (21 years)
- First Nation Community

Indian Reserve

Trapline

Area Withdrawn from Mining

Land Notice (Title Claim / Potential Protected Area)

Major River Basin

This product is for informational purposes and is not suitable for legal, surveying or navigation purposes. Every effort is made to ensure this map is free of errors but there is no guarantee this map is spatially or temporally accurate or complete. This map is provided without any warranty of any kind whatsoever.



# We want your feedback!



Are you already  
using the  
Ontario Mineral  
Tracker tool?



Had you heard  
of the tool  
before today?



What would  
make you more  
likely to use the  
tool?



Is the text  
information on  
the maps  
useful?



Are the data  
layers on the  
maps useful?



Are the  
Facebook posts  
and email  
newsletter  
helpful?

Do you have any criticisms or suggestions for improvements  
that you would like to share?

# Data democratization

## Making data more accessible:

- Bringing different government datasets together in one map
- Showing spatial data for proposals that can damage the environment
- Visualize impacts at landscape-scale
- Easy to share posts with others
- Easier to submit comments on the ERO to oppose unwanted mining activities



Image created using Microsoft Copilot Image Generator.

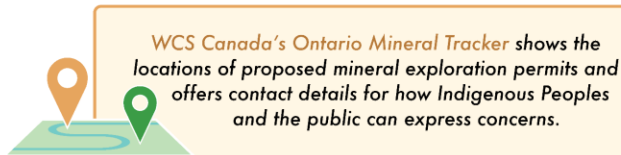


# Other resources from WCS Canada

## Why should you care about mineral exploration permits?

Impacts to the environment from the mining sequence start long before a mine is built, and exploration happens over a much larger area than the footprint of any eventual mine. Early awareness of proposed mineral exploration permits can help communities make decisions about what happens on the land.

- These lands are Indigenous Homelands, and Indigenous communities are currently not consulted when mining claims are made in Ontario. The first chance for Indigenous Peoples and the public to raise concerns is when prospectors apply for a mineral exploration permit.



When communities raise concerns about a proposed mineral exploration permit, the Ministry can withhold approval until these concerns are addressed. This is one of the easiest and least costly ways to oppose early stages of the mining sequence. If mineral exploration still goes ahead and additional legal action is later taken, this initial opposition can provide strong evidence of the government's inadequate consultation effort and the community's longstanding concerns.



## OTHER OPTIONS TO OPPOSE UNWANTED MINING ACTIVITIES

Read about nine options that can be taken as first steps in opposing mining activities within the current legal frameworks on the Ring of Fire website: [wcsringoffire.ca](http://wcsringoffire.ca)



## STAGES OF THE MINING SEQUENCE

**1. Staking claims** grants prospectors the legal mineral rights to extract minerals from below the land surface.

**2. Early exploration** includes cutting many access paths through forests in search of minerals, using heavy machinery to strip away the plants and soil down to bedrock, and drilling to collect rock samples.

**3. Advanced exploration** involves extensive drilling to estimate the worth of a mineral deposit.

**4. Development** involves building the mine and other construction the mine needs to run (like transmission lines and roads).

**5. Production** is the active mining stage.

**6. Closure** involves hazard removal and site restoration, but Ontario has a history of abandoned mines that were not properly closed.

The window for public input is from the second to the fourth stage.



As of January 2024, there are 380,909 claims in Ontario covering 103,682 square kilometers — an area twice the size of Nova Scotia.

## ✓ PUBLIC INPUT

Larger-scale early exploration requires an exploration permit with opportunity for public comments. Exploration requires a permit if:

- access paths cut are over 1.5 m wide,
- areas greater than 100 m<sup>2</sup> are stripped of plants and soil,
- or more than 1 m<sup>3</sup> of bedrock is excavated.

✗ Exploration activities below these thresholds do not require public input.



Ontario is the only jurisdiction in Canada that doesn't require an environmental assessment for mines. Environmental assessments are used to understand environmental concerns that are specific to the area and think about alternatives that might reduce risks and impacts.



As of 2023, almost 6000 abandoned mines persist in Ontario.



- More than Minerals website
- Mining infographics
- YouTube videos (still in progress)



Ontario Is More Than Minerals  
(website)

# Other ways you can oppose mining activities

## You can oppose unwanted mining activities in your homeland

Options for Indigenous Peoples to oppose unwanted mining activities are limited within the current Canadian and Ontario legal framework. The options don't reflect Indigenous worldviews, don't cover many inherent rights held by Indigenous Peoples, and can reflect an inadequate recognition of Indigenous jurisdiction. However, knowledge on the options that do exist can help you succeed.

Below are nine options that can be taken as first steps in opposing mining activities within the current legal frameworks:

- 1. RESPOND TO CONSULTATION:** During the **early mining process**, companies must submit an **Exploration Plan** or **Exploration Permit** before they begin mineral exploration activities. Under the Ontario **Mining Act**, the Ontario Ministry sends out **requests for consultation** when companies submit Exploration Plans and Permits. If communities raise concerns, such as disruptions to Indigenous rights and the ecological wellbeing of the land, the Ministry might withhold approval until concerns can be addressed. This is one of the easiest and least costly ways to oppose unwanted mining activity at an early stage. If mining activity still goes ahead and additional legal action is taken, having this type of initial opposition can provide strong evidence of the government's inadequate consultation effort, and the community's longstanding opposition.  
  
*WCS Canada provides up-to-date information on all new applications for mineral Exploration Permits. If you see an Exploration Permit in an area where mining activities are unwanted, you can contact the Ministry and oppose this Exploration Permit.*
- 2. IDENTIFY SITES OF ABORIGINAL CULTURAL SIGNIFICANCE:** The Minister can withdraw lands from mining if they are recognized as a site of **Aboriginal Cultural Significance**. Identifying a site requires an application process, is limited to 25 hectares or smaller, and may require professional evidence of the site's significance. Sites such as places of worship, burial grounds, ceremonial lands, pictographs, and petroglyphs can be recognized. Other sites such as trap lines, hunting or fishing grounds, or travel routes will not qualify. Despite these limitations, applying for a land withdrawal can offer long-term protection for some important sites. [Click here for the link to the application form.](#)
- 3. CREATE A COMMUNITY-BASED LAND-USE PLAN:** Under the Ontario **Far North Act**, community-based land-use plans can help create large, protected areas withdrawn from mining activity. These plans have a long, costly process, and require Ministry approval. Mining activity can still proceed if it was approved before the plan and can take place without a plan. However, a successful example includes **1.3 million hectares of land withdrawn from mining** to support the Marten Falls First Nation plan.
- 4. FEDERAL IMPACT ASSESSMENT ACT:** Early mineral exploration activities don't require an impact assessment. However, section 9(1) of the **Impact Assessment Act** allows Indigenous communities to request an impact assessment from the Minister. Although it is not a common

approach, requesting an assessment could potentially lead to mitigation measures or the cancellation of the project. [Click here for full details on making a request.](#)

- 5. ABORIGINAL TITLE CLAIM:** When a title claim is made, Ontario might withdraw the claimed territory from mining until the claim is resolved. This is a long process and requires evidence that First Nations making the claims did not cede their lands to the Crown. It involves court hearings, negotiations, and major expenses. If successful, it can lead to stronger protection of Indigenous rights, and more power in opposing mining. For example, in 2022, the Minister withdrew **39,000 hectares of land from mining** as a result of Biinjitiwaabik Zaaging Anishinaabek's (Rocky Bay First Nation) ongoing title claim. [Click here for active title claims in Ontario.](#)
- 6. CUMULATIVE EFFECTS CLAIM:** Communities can make a claim that Ontario breached its treaty promise by allowing too many projects to take place if the added effects of these projects negatively impact treaty rights to hunt, fish, and trap on the land. This type of legal claim is lengthy and expensive, but **was successful in Canada for the first time in 2021, with Blueberry River First Nations in BC.**
- 7. COURT-ORDERED INJUNCTION:** Injunctions can temporarily stop a company from conducting exploration activities. **A recent study showed that only 18% of claims are successful,** but it is less expensive than a title claim or cumulative effects claim. For example, in 2021, Ginnoogaming First Nation was **granted an injunction** against mining exploration in their territory.
- 8. DIRECT ACTION AND DECLARATIONS:** Declarations and blockades can be incredibly costly for communities. There is risk of police intervention, violence, imprisonment, and financial penalties. Given this, the decision to engage in direct action should not be taken lightly. In one example from 2005, Kitchenuhmaykoosib Inninuwug (KI) **declared a moratorium** (ban) on mining and logging. Following years of blockade, during which 6 community leaders were imprisoned, Ontario withdrew 2.3 million hectares of KI territory from mining.
- 9. INDIGENOUS-LED CONSERVATION INITIATIVES:** Indigenous governments hold the fundamental right to designate **Indigenous Protected and Conserved Areas (IPCAs)** in their territories and IPCAs have been formally recognized in some jurisdictions. While the government of Ontario has not yet recognized an IPCA, it may provide a new pathway for **moving Indigenous-led conservation initiatives forward.**

We sincerely thank Dr. Dayna Scott and Jeremy Korb from Osgoode Hall Law School for their research and invaluable edits that contributed to this summary.

# We want your feedback!



Are these tools and  
resources useful?



What other tools or  
resources might you want?

Do you have any criticisms or suggestions for improvements  
that you would like to share?





Facebook Page



Newsletter Sign Up



## Questions? Feedback?

---

**Meg Southee** (based in Toronto)  
Lead Geospatial Analyst/Programmer  
[msouthee@wcs.org](mailto:msouthee@wcs.org)

**Connie O'Connor** (based in Thunder Bay)  
Program Director, Ontario Northern Boreal Program  
[coconnor@wcs.org](mailto:coconnor@wcs.org)