

26 September 2023

Permitting Activities Continue at Mavis Lake Lithium Project with Environmental Studies and Cultural Training

Highlights

- Field Teams deployed to Mavis Lake with key monitoring and assessment efforts continuing to support permitting of a future mining operation.
- Environmental characterization and study programs underway include:
 - Hydrology – both Spring and Summer programs have been undertaken to capture seasonal water movement and establish baseline water quality.
 - Fisheries – initial monitoring and assessment supported by an experienced First Nations environmental monitor.
- Critical Resources staff and contractors undertook cultural training sessions prior to mobilization to the Mavis Lake Project Site.
- Planning is underway for the next phase of environmental assessment, with a focus on geochemistry, vegetation, wildlife and archaeology.
- Community liaison and engagement initiatives continue with a series of information sessions scheduled for October 2023.

Lithium exploration and project development company Critical Resources Limited **ASX:CRR** ("Critical Resources" or "the Company") is pleased to provide an update on ongoing environmental studies and permitting activities for its flagship Mavis Lake Lithium Project in Ontario, Canada. The studies are key field-based work streams that will underpin the Company's environmental permitting activities required for a future mining operation.

Environmental Studies Overview

Critical Resources commenced environmental studies in the Spring of 2023, to determine the existing baseline conditions associated with the Mavis Lake Project Area. This work will support the future Environmental Assessment for a proposed mine development.

An Area of Focus (AOF) was identified to capture the footprint for a proposed site where the majority of development would likely occur. Environmental baseline studies are required to support



the anticipated Environmental Impact Assessment (EIA) process and to assist in identifying alternative design options and a preferred layout for a proposed mine and processing facilities.

The commencement of fieldwork studies will supplement the findings of the Preliminary Baseline Studies, which were completed during the period October 2022 to February 2023.

A comprehensive study program is planned to take place over the next several seasons, and will include:

Study	Description
Surface Water Quality	Establish baseline water quality and determine the need for water monitoring and management during a life of the mine. Sampling sites have been established.
Hydrology	The water flow and levels of streams, ponds and lakes will be monitored to provide a basis for developing relationships that facilitate the estimation of water discharge for each day of the year.
Archaeology	A staged study to identify potential archaeological resources and protect the area's natural and cultural heritage.
Fisheries	Characterize fish habitat, determine fish presence and describe the fish community through species identification and sampling of fish, lengths and weights.
Terrestrial and Wetland	Describe vegetation communities, identify rare or significant features, and characterize wildlife use of the area.
Hydrogeology (groundwater)	Undertake trend assessment of groundwater conditions and movement related to each planned project component.

Current Field Works

With a focus on hydrology and surface water management, seven water flow stations have been established at the Mavis Lake site, with each station visited seasonally to characterise water movement through the site. The hydrology field study program began in the Spring of 2023, with quarterly sampling occurring in the Summer, Fall and through into the Winter of 2024. The hydrology works capture stream flow, flow variability and confirm connectivity of creeks and lakes.

In addition to capturing water movement, four water quality stations have also been established. Water quality monitoring principally focuses on taking water samples to record key data such as pH, metals and oxygen levels.

During September 2023, initial fisheries studies commenced including habitat mapping, electrofishing/netting in ponds, streams and lakes to determine presence of fish, develop an understanding of the fish communities and determine if any sensitive watercourses are present. This baseline study will allow the project design to consider and mitigate any potential impact of the fish habitat.

Figure 1 shows fisheries field teams in action at site. Critical Resources was fortunate to be able to have a First Nations environmental technician supporting the fisheries assessment.



Figure 1 – Electrofishing and netting for fish species data collection.

Future Works

Planning and contractor engagement has commenced for the conduct of geochemistry studies, with this work expected to continue for the following 1-2 months.

The next study phase will be the Stage 1 Archaeology Assessment, which will be undertaken in close consultation with First Nations communities. The Stage 2 Archaeology Assessment will commence in Spring of 2024.

The next field assessment will focus on vegetation and wildlife, commencing during the Spring of 2024.

The Company's Management and Executive staff are in the process of arranging a number of information sessions and briefings in and around the Dryden area during the month of October. The Company encourages all interested parties to attend, contact details for further information can be found below or via the Company's website.

Cultural Training

Critical Resources personnel and contractors were honored to take part in a cultural training workshop facilitated and shared by Wabigoon Lake Ojibway Nation ("WLON"). This valuable session afforded the participants the opportunity to establish a better understanding of the Indigenous peoples'¹ rich history as protectors of the lands and waters of the territory where the Project is located.

¹ The indigenous people in the project area are the Anishinaabe. Critical Resource's Lithium Project is located within Treaty Three traditional Territory of the Anishinaabeg Nation and the Northwestern Ontario Metis Communities in the province of Ontario Canada.



Critical Resources' Managing Director Alex Cheeseman said:

"These work streams are incredibly important and are key, early-stage efforts that must be undertaken to allow the project to advance towards development.

"The Mavis Lake Project is planned to produce lithium that will support the global effort to decarbonize the economy. We must ensure that our role in that global effort is underpinned by an operation that is carefully and deliberately designed to have the lowest possible impact.

"Understanding the environment, the culture and history of the Indigenous people in the area and working together in a positive and cooperative fashion is the best way for us to move the project forward in a manner that delivers progress while also ensuring respect to the lands, waters and our neighbors."

This announcement has been approved for release by the Board of Directors.

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ABOUT CRITICAL RESOURCES LIMITED Critical Resources is advancing and developing critical metals projects for a decarbonised future. The Company holds a suite of lithium prospects across Ontario, Canada, including Mavis Lake, Graphic Lake, Plaid and Whiteloon Lake. The Company's other projects include a copper project in Oman, and a base metals project in Halls Peak NSW, Australia.

The Company's primary focus is the rapid development of its flagship Mavis Lake Lithium Project. Mavis Lake is an advanced exploration project with near-term development potential. The Company completed over 19,500m of drilling in 2022 and has commenced another significant drilling program in 2023. In early 2023, Critical Resources released its maiden JORC Code 2012 Compliant Inferred Mineral Resource Estimate (MRE) for Mavis Lake with 8.0Mt at 1.107% Li₂O – making Critical Resources just one of two ASX-listed companies with a JORC Code 2012 compliant mineral resource in Ontario. In parallel with continued Resource growth, the Company has also commenced initial studies that will underpin the transition from explorer to developer.

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