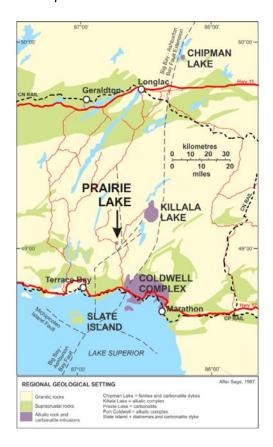


# Nuinsco Provides Update on Prairie Lake Critical Minerals & Phosphate Project and Maiden Resource Estimate

**Toronto, February 23, 2022** – Nuinsco Resources Limited ("**Nuinsco**" or the "**Company**") (CSE: NWI) today provided an update on progress at its Prairie Lake Critical Minerals and phosphate project located near Terrace Bay, Ontario ("**Prairie Lake**" or the "**Project**").

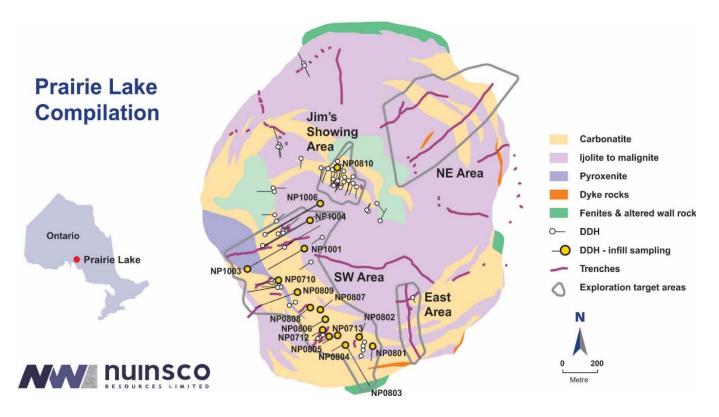
Throughout 2021 the Company completed a substantial program of drill hole sampling that produced a number of significant continuous intersections of 100m or more containing rare earth elements ("REE"s), niobium, tantalum and phosphate mineralization; this mineralization commences at or near surface and none of the intersections are closed off at depth. Other recent work at the Project included mineralogical studies to develop increased understanding of distribution of minerals and elements of economic interest. Metallurgical studies have demonstrated the potential to significantly upgrade the neodymium and other REE grades in concentrate. All of this work is now being used to prepare a maiden mineral resource estimate ("MRE") under NI 43-101 and subsequent economic evaluation of Prairie Lake.

"In addition to expanding the domain of critical mineral-endowed rock in the Southwest area ("**SW Area**") at Prairie Lake through the Company's sampling program (refer to press releases issued between July and November, 2021) we have revisited and closely examined aspects of the geology, mineralogy and metallurgy as they pertain to distribution, processing, and recovery of the suite of elements of economic interest at the Project," said Paul Jones, Nuinsco's CEO. "Earlier studies commissioned by the Company have demonstrated the widespread nature of REEs, niobium, tantalum, and phosphate mineralization, process testing has demonstrated the potential to produce high-value rare earth and phosphate-bearing concentrates and soon we expect to be able to confirm and publicly discuss these positive results with the completion of the maiden MRE."



The Project benefits from being in a politically stable jurisdiction; is exceptionally located near to available rail, road, shipping, and power infrastructure; and is ideally placed in North America with respect to current supply chain concerns for critical minerals.

The recent work conducted by the Company focused on expanding the mineralized intersections in the SW Area. The SW Area is more than one kilometre in length, between 100m and 750m wide and contains an Exploration Target of 435-530 Mt (see "Prairie Lake ET" table below) of rock endowed with critical elements of economic interest. Recent mineralogical studies commissioned by the Company have identified a suite of REE-bearing minerals including apatite, monazite, bastnaesite, carbocernaite/burbankite, and ancylite, and niobium-bearing pyrochlore in the rocks of the complex. Understanding the mineralogy of the critical element-bearing phases is central to obtaining positive results from potential extractive processes that might be applied to exploit Prairie Lake mineralization.



Prairie Lake hosts a suite of elements of economic interest identified as Critical Elements defined under the Canadian Minerals and Metals Plan ("CMMP"), including:

Phosphate (P<sub>2</sub>O<sub>5</sub>) – trading at circa US\$173/t (phosphate concentrate). This compound has enormous agricultural applications as a fundamental component of fertilizers (it is the P in the N-P-K rating of fertilizer). As such it is central to global food production. Global phosphate shipments (all applications) are approximately 72Mt per annum and are expected to expand as the global population increases and greater food production is required. In late 2019, Nuinsco received a listing by the Organic Materials Review Institute (https://www.omri.org/) of the project's calcium carbonate rock for use in organic food production or food processing and handling according to the USDA's National Organic Program regulations, yet another indication of Prairie Lake's increasing value. Phosphate-bearing calcium carbonate rock (also known as phosrock) such as is found at Prairie Lake can be used as a soil amendment to revitalize land which has lost its fertility as a result of excessive chemical farming.

**Niobium (Nb)** – trading at circa US\$50/kg (Nb $_2$ 0 $_5$  in concentrate). This element has broad applications in structural steel and in the transportation sector. Nb added to steel produces lightweight and strong alloys that reduce vehicle and aircraft weight and material requirements in buildings and structures, thus improving energy efficiency and

reducing adverse environmental emissions.

**Tantalum (Ta)** – trading at circa \$250/kg ( $Ta_2O_5$  in concentrate). The most significant use for tantalum is in the production of electronic components used in mobile phones, computers, and automobiles. It is also used to produce alloys with applications in aerospace, processing equipment, and medicine.

**Neodymium (Nd)** – trading at circa US\$190/kg (Nd-oxide 99.5% pure). This element is central to the development and production of permanent magnets used in traditional, electric and hybrid vehicles and wind turbines. Demand for these applications is projected to expand substantially with the electrification of the global vehicle fleet and expansion of the capacity for renewable electric-power generation worldwide.

**Scandium (Sc)** – trading at circa US\$1,250/kg (Sc-oxide 99.9% pure). Scandium has applications in fuel-cell technology, lighting components, and is alloyed with aluminum to impart heat-resistance and strength where it is used in aerospace components. Greatly expanded use in aerospace and automobile sectors is projected with the expansion of supply.

In addition to the elements listed above, Prairie Lake contains substantial grades of lanthanum, yttrium, and praseodymium mineralization.

Prairie Lake consists of 46 mineral claims covering an area of  $^{\sim}630$  ha. Prairie Lake is superbly located, easily accessed by an all-weather road from the TransCanada Highway located 28 kilometres to the south. The ET is defined by 59 diamond drill holes.

## Prairie Lake Drilling & Trenching by Target Area1:

		sw	Jim's Showing	East	NE	Other Areas	Total
Historic Drill Holes (1969-1983)	Drill Holes	16	11	1	0	17	45
	Metres	1351.7	938.4	34.1	0	1528.5	3852.7
Drill Holes (2007- 2010)	Drill Holes	21	10	0	0	1	32
	Metres	6632	1692.4	0	0	101	8425.4
Trenches (2010)	Trenching	1	0	2	2	0	5
	Metres	377.7	0	433.0	754.55	0	1562.2

<sup>&</sup>lt;sup>1</sup> Trench lengths are calculated as cumulative length of samples along trench.

## Prairie Lake ET<sup>2</sup>:

	SW	Jim's Showing	East	NE	Total
REEs					
La (ppm) Lanthanum	275 - 340	295 - 360	305 - 370	200 - 250	280 - 340
Ce (ppm) Cerium	650 - 790	670 - 820	670 - 820	450 - 550	650 - 790
Sm (ppm) Samarium	55 - 70	55 - 70	55 - 70	50 - 60	55 - 70
Nd (ppm) Neodymium	295 - 360	290 - 360	320 - 390	235 - 290	300 - 360
Y (ppm) Yttrium	85 - 100	90 - 110	80 - 100	135 - 170	85 - 100
La+Ce+Sm+Nd+Y (ppm)	1360 - 1660	1400 - 1720	1430 - 1750	1070 - 1320	1370 - 1660
Additional Elements (as oxides)					
P <sub>2</sub> O <sub>5</sub> (%) Phosphate	3.0 - 4.0	3.5 - 4.5	2.5 - 3.0	2.5 - 3.5	3.0 - 4.0
Nb <sub>2</sub> O <sub>5</sub> (%) Niobium	0.095 - 0.115	0.100 - 0.120	0.040 - 0.050	0.085 - 0.105	0.090 - 0.110
Ta₂O₅ (ppm) Tantalum	18 - 25	25 - 30	5 - 7	10 - 12	18 - 21
Volume - m³ (million)	140 - 175	12 - 14	13 - 16	2 - 3	170 - 210
Tonnes (million)	435 - 530	35 - 45	40 - 50	7 - 8	515 - 630

<sup>&</sup>lt;sup>2</sup> A full description of methodology used to estimate the Prairie Lake Project Exploration Target is contained in the Technical Report dated 30

November 2018 prepared by P&E Mining Consultants Inc. that is filed on SEDAR. The potential quantity and grade of the ET is conceptual in nature and there has been insufficient exploration to define a mineral resource. It is uncertain if further exploration will result in the discovery of a mineral resource. There is no National Instrument 43-101 — Standards of Disclosure for Mineral Projects preliminary economic assessment in respect of the Prairie Lake ET.

Laura Giroux, P.Geo, Chief Geologist, acts as Nuinsco's Qualified Person under National Instrument 43-101. Ms. Giroux has reviewed and approved the technical contents of this news release.

#### **About Nuinsco Resources Limited**

Nuinsco Resources has over 50 years of exploration success and is a growth-oriented, multi-commodity mineral exploration and development company focused on prospective opportunities in Canada and internationally. Currently the Company has four properties in Ontario – the high-grade Sunbeam gold property near Atikokan, the Dash Lake gold property near Terrace Bay, the large multi-commodity (rare-earths, niobium, tantalum, phosphate) Prairie Lake project near Terrace Bay, and the Zig Zag Lake property (lithium, tantalum) near Armstrong. In addition, Nuinsco has an agreement for gold exploitation at the El Sid project in the Eastern Desert of Egypt.

#### Forward-Looking Statements

This news release contains certain "forward-looking statements." All statements, other than statements of historic fact, that address activities, events or developments that Nuinsco believes, expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek," "anticipate," "believe," "plan," "estimate, "expect," and "intend" and statements that an event or result "may," "will," "can," "should," "could," or "might" occur or be achieved and other similar expressions. These forward-looking statements reflect the current expectations or beliefs of Nuinsco based on information currently available to Nuinsco. Forward-looking statements are subject to a number of risks and uncertainties that may cause the actual results of Nuinsco to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on Nuinsco. Factors that could cause actual results or events to differ materially from current expectations include, among other things, failure to successfully complete financings, capital and other costs varying significantly from estimates, production rates varying from estimates, changes in world copper and/or gold markets, changes in equity markets, uncertainties relating to the availability and costs of financing needed in the future, equipment failure, unexpected geological conditions, imprecision in resource estimates, success of future development initiatives, competition, operating performance of facilities, environmental and safety risks, delays in obtaining or failure to obtain tenure to properties and/or necessary permits and approvals, and other development and operating risks. Any forwardlooking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, Nuinsco disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although Nuinsco believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.

To learn more, please visit <u>www.nuinsco.ca</u> or contact:

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