Lost River Mining

Critical Minerals for a Sustainable American Future
Lithium, Tin, Tungsten, and Fluorite on Alaska's Seward Peninsula

Multiple critical minerals

Expanding on a historical tin mine[1]

District exploration potential

Local support

Large scale and multiple commodities support long-term viability

Newly discovered lithium deposit

Established tin-tungsten-fluorite deposits with historical feasibility report

Located on tidewater, in the United States, close to soon-to-be-constructed deep-water port facilities

Opportunity to source domestic lithium, tin, tungsten, and fluorspar at industrial scale

SK1300-compliant PEA expected Q2 2025

Supports U.S. Government policy and strategy

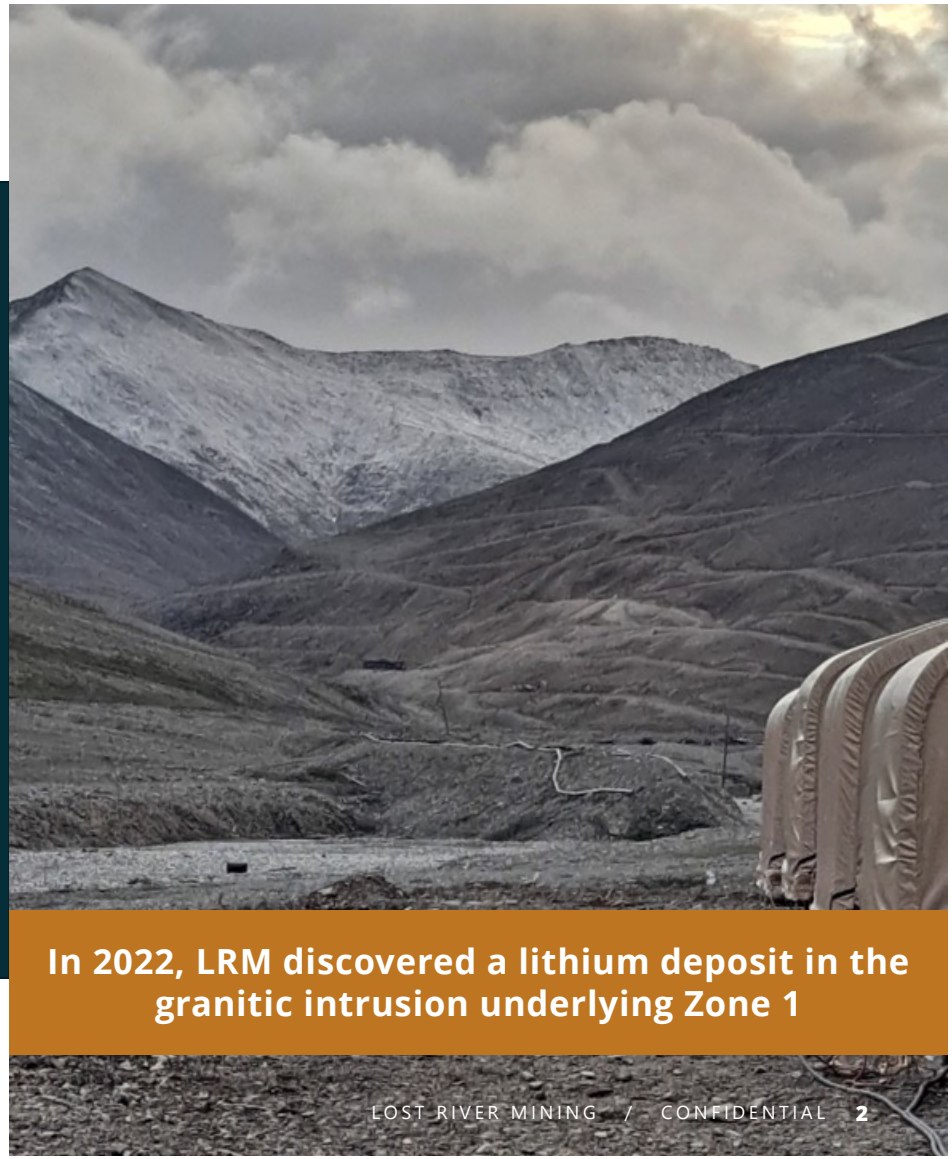
[1] Karl, N.A., Burger, M.H., and Long, K.R., 2018, Tin Deposits in the United States: U.S. Geological Survey data release, https://doi.org/10.5066/P97JYNJL

Lost River Mining, Inc. (“LRM”) is a private American critical minerals company based in Alaska led by an experienced team of mining entrepreneurs, geologists, and senior advisors

Prospectors discovered the Lost River mineral deposits in 1903

During the 1970s, previous operators established the economic viability of Zone 1’s near-surface, low-strip tin-tungsten-fluorite deposit.[1] Sagging commodity prices, world economic conditions, and complications with land use agreements prevented the mine from being built

Fifty years later, the Lost River project has very different parameters—especially after LRM’s 2022 lithium discovery



In 2022, LRM discovered a lithium deposit in the granitic intrusion underlying Zone 1

[1] Watts, Griffis, and McOuat, Ltd., *Feasibility Report for Lost River Mining Corporation Limited on the Lost River Fluorite-Tin-Tungsten Project*, 1973, produced prior to the adoption of modern NI 43-101 and SK-1300 standards

Officers and Directors, Lost River Mining

Clark Gillam

Board, President

Co-founder Nebari Holdings

Iron ore trading, Glencore

Portfolio management, McKinley Capital

MS finance, Trinity College;
BS economics, Wharton

Lance Miller

Board

VP, Natural Resources, NANA Alaska Native Corporation

30 years in the minerals industry

PhD economic & structural geology

Dan Freuman

Board

Co-founder Nebari Holdings

Senior trader, M&A, and business development, Glencore

Analyst, Perry Capital and JPMorgan

MBA, Columbia Business School;
BA economics & finance, Princeton

Travis Miller

Board

15 years experience in mine operations, development, and finance

VP, Sunshine Mining Company

LRM Operations and Technical Team

Robert Selwood
Project Manager

Economic geologist with 13 years of experience in base metals, gold, and geothermal exploration and development

Previous work in South America, Southern Africa, and the western U.S.

BS Geology (Camborne School of Mines) and MS in Geology (UNR Center for Research in Economic Geology)

Steve Ristorcelli
Independent Technical Consultant

45 years in minerals exploration: 15 years for small exploration and mining companies; 30 years as a consultant

Principal, Mine Development Associates (MDA): helped grow it into a premier mining consultancy

BS and MS Geology; Certified Professional Geologist

Odin Christensen
Independent Technical Consultant

45+ years in minerals exploration and mining: 20 years as a consultant; 21 years with Newmont Mining

Chief Geologist for Newmont Mining, 1991-2000

BS and PhD Geology, Stanford; Certified Professional Geologist

Gregory Crouch
Investor Relations, Business Dev., Project Execution

Mining historian

Kougarok Mining Corporation; Mackay Precious Metals

Author, numerous publications

BS History, United States Military Academy

John Odden
Alaska Manager & Logistics Coordinator

Professional geologist for 32 years

Alaska resident for 38 years, last 17 in Nome

Co-founder of Sample Archive System and Raven Recycling and Logistical Services

Sara Holden
Geologist

Ore control, database management, resource modeling

BS Geology, Fort Lewis College

MS Geology, University of Nevada, Reno

MS thesis on mineralogy and geochemistry of lithium clays in the McDermitt Caldera, Oregon

Lost River


Zone 1
Upper Camp
Flying up the Lost River Valley


Wales
Tin City
York
Lost River
Brevig Mission
Port Clarence
Teller
Marys Igloo
Nome
Fort Davis
135km Lost River to Nome

Capitalizing on the Past to Build the Future

Many USGS & USBM studies conducted at Lost River in the last 120 years[1]

≈29,000m drilled at Lost River, 1942-1979[2]

24-volume Feasibility Report published in 1973 ("1973 FR")[2]

Potentially economic deposits of minerals considered "critical" by U.S. Government—lithium, tin, tungsten, and fluorite:

- ✓ Largest known tin resource in the United States[3]
- ✓ Unique deposit—the best tin-tungsten-fluorite grades can be mined early
- ✓ Lithium identified in early exploration but never quantified

LRM's exploration results identified a Lithium Exploration Target in the granite intrusion underlying the historically defined tin-tungsten-fluorspar resource

Initial resource estimate currently being checked; finalized results expected in the next few weeks

2024 exploration designed to expand mineral resources and raise classification

[1] Numerous USGS and USBM reports
[2] Watts, Griffis, and McOuat, Ltd., *Feasibility Report for Lost River Mining Corporation Limited on the Lost River Fluorite-Tin-Tungsten Project*, 1973
[3] Karl, N.A., Burger, M.H., and Long, K.R., 2018, *Tin Deposits in the United States: U.S. Geological Survey data release*, https://doi.org/10.5066/P97JYNJL

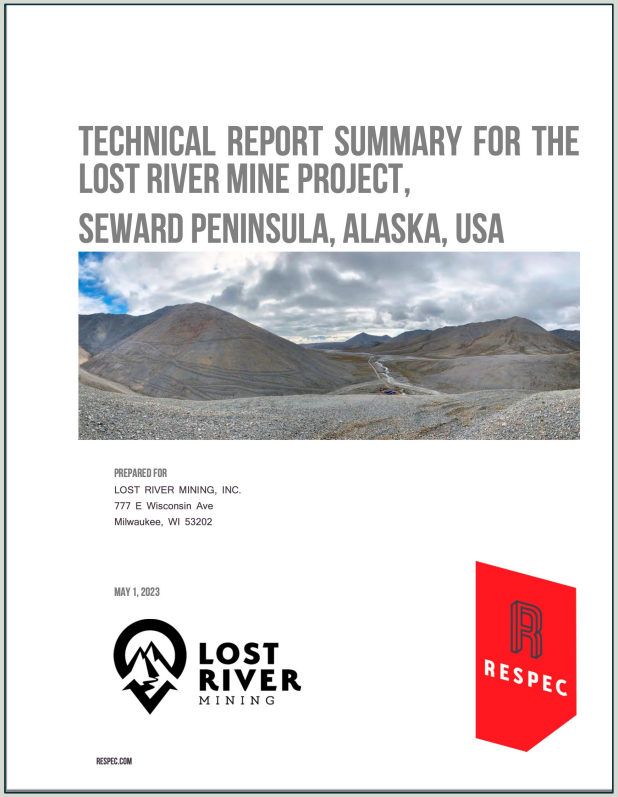
LRM's Accomplishments

1. Discovered a lithium deposit
2. Expanded land package by more than 26,000ha
3. Completed an SK-1300 technical report based on historical information and the results of 2022 drilling
4. Completed two drill campaigns in Zone 1
5. Conducted regional geochemical and geophysical surveys that defined exploration targets beyond Zone 1
6. Initiated mineralogical and metallurgical studies and test work crucial to assessing processing options and classifying resources
7. Initiated environmental baseline studies critical to timely permitting
8. Curated relationships with Native stakeholders at Inalik Village Corporation (IVC) and Bering Straits Native Corporation (BSNC)
9. Submitted white paper to Department of Defense (DOD) soliciting support from the Defense Production Act Title III—white paper "favorably reviewed" by the DOD in January 2024

2023 Drilling at Lost River

LRM's *Technical Report Summary*

1. Most of the work done in Q1 2023
2. Effective date of April 7, 2023, *before* the 2023 field season
3. Forced us to think diligently about all aspects of the project
4. Clarified our geological understanding
5. Guided our planning for 2023 and beyond
6. Although the report antedates LRM's 2023 exploration, its existence prepares us to much more easily produce an SK-1300 compliant resource and PEA for Zone 1



LRM's Zone 1 Exploration

LRM took over the project knowing little about the granite besides the fact that it contained some tin mineralization

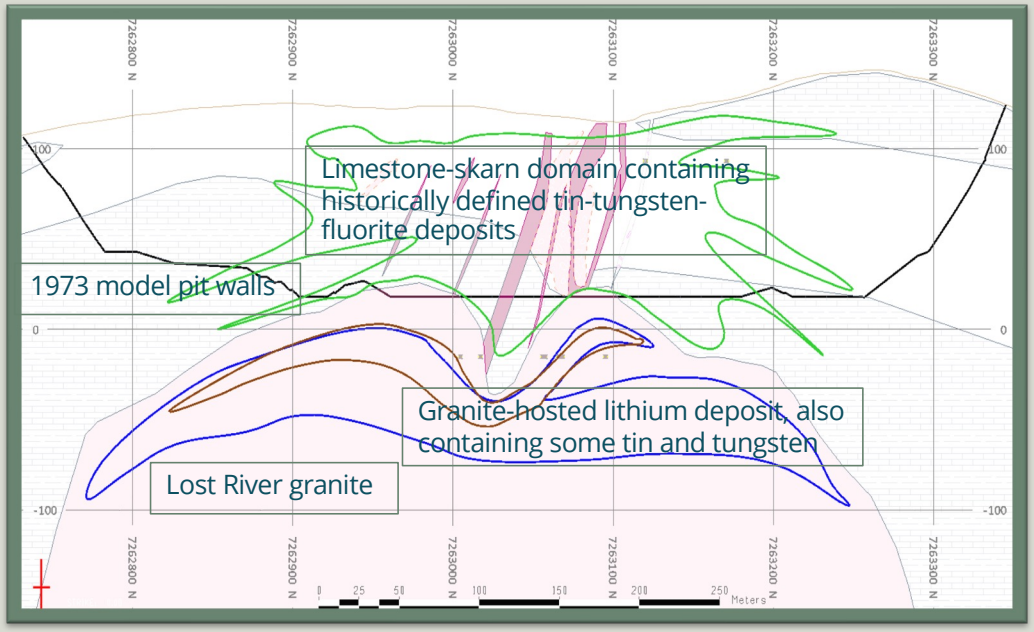
In 2022 and 2023 combined, LRM drilled 65 holes and 15,431m

Validated tin, tungsten, and fluorite mineralization in the near-surface limestone-skarn that had been defined by historical explorers and their geological model

Discovered a lithium deposit

Defined a formal Lithium Exploration Target in the granitic intrusion:

- **≈19Mt of 0.6% Li_2O[1]**, 0.06% Sn, 0.02% W
- Inside ≈81Mt grading ≈0.37% Li_2O, 0.04% Sn, 0.01% W
- Growth potential to the west and south and in depth



Formal resource estimate currently being checked

Finalized results expected in the next few weeks

All data: LRM's 2022 & 2023 drill exploration programs

[1] The conversion of dilithium oxide to lithium metal is about 2.16 to 1

Zone 1 Geological Model

Blue is the surface

Gray is the historically defined limestone-skarn

The near-vertical lines are LRM's 2022 (green) and 2023 (brown) drill holes

Pink represents the underlying granitic intrusion.

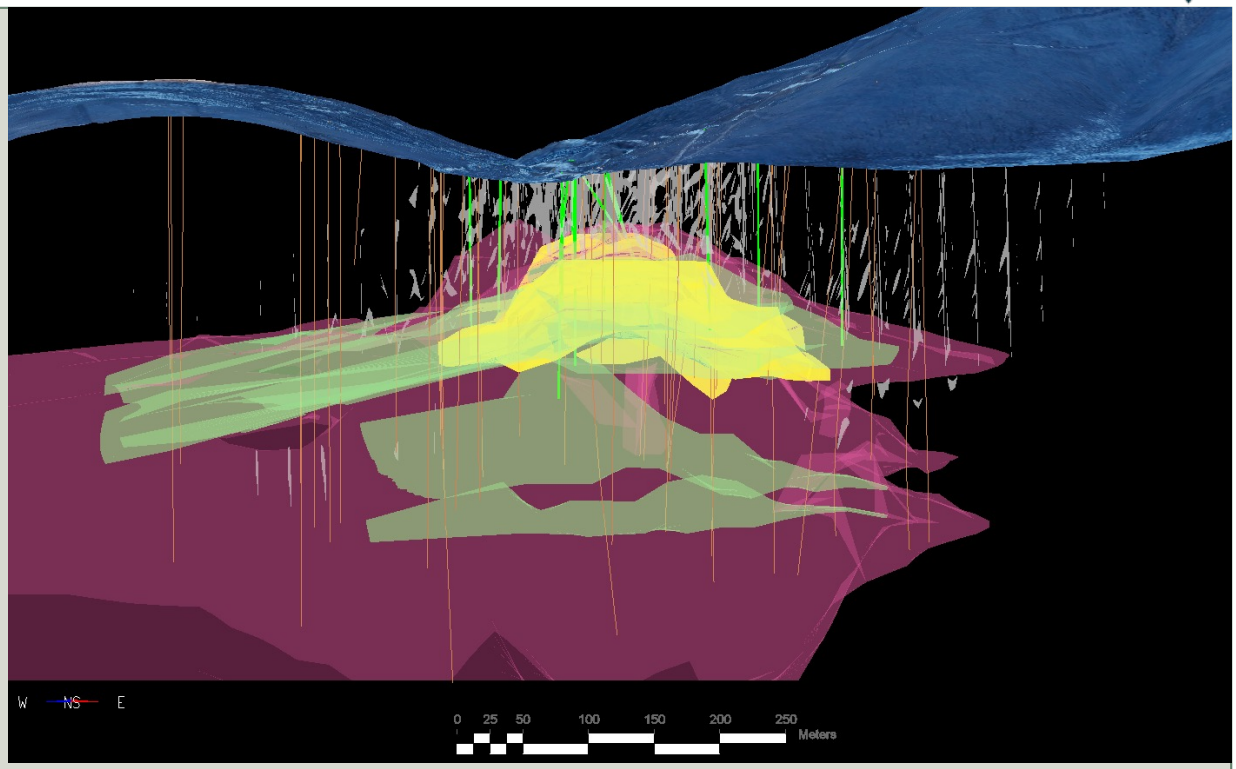
Yellow shows LRM's 2022 lithium discovery and the Lithium Exploration Target defined by 2022 exploration

Green indicates the expansion of lithium mineralization discovered by 2023 drilling

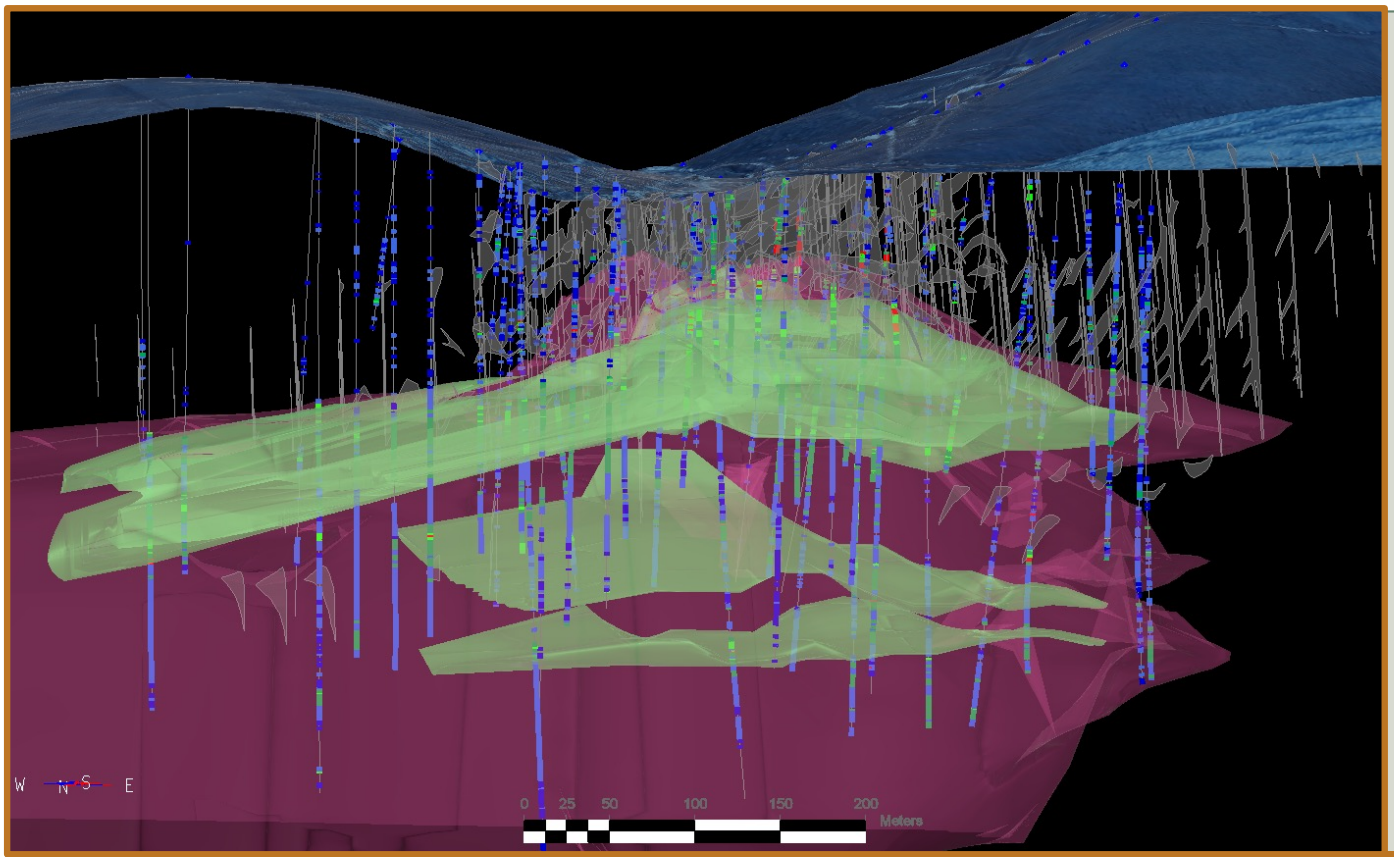
LRM's 2022 & 2023 exploration has raised the classification of the yellow and the green areas to an Inferred Resource

Estimate currently being checked and verified

Final results expected in a few weeks



Detailed View—Zone 1



The vertical and near-vertical lines are 2022-2023 drill holes, with the warmer colors showing higher lithium grades

2024 drill exploration designed to test step-out mineralization to west and south and to upgrade resource classification

Significant Lithium and Tin Intercepts, Zone 1

Significant Lithium Intercepts

2022

Hole	From (m)	Length (m)	Li_2O%	Host Rock
LR-22-008	94.9	57.5	0.71	granite
LR-22-013	105.2	19.8	0.98	granite

2023

Hole	From (m)	Length (m)	Li_2O%	Host Rock
LR-23-001	60.3	175.6	0.31	granite*
LR-23-002	8.8	65.7	0.47	skarn
LR-23-002	74.5	257.9	0.33	granite
LR-23-004	210	80.5	0.45	granite*
LR-23-011	43.3	44.2	1.03	breccia**
LR-23-013	205.4	104	0.6	granite

*ended in significant mineralization; **part of the limestone-skarn domain above the granite

Based on our internal economic scoping, we believe that the Zone 1 lithium deposit is Lost River's most valuable mineralization

Significant Tin Intercepts

2023

Hole	From (m)	Length (m)	Sn%	Host Rock
LR-23-001	0	57	0.23	skarn
LR-23-002	0	74.5	0.21	skarn
LR-23-002	237	42	0.33	granite
LR-23-011	0	163.1	0.28	Multiple*

*above and into top of granite

Metallurgical test work performed by third party consultants suggests that zinnwaldite hosts the vast majority of the lithium at Lost River and that most tin reports to cassiterite

Metallurgical Advancements, 2023-2024

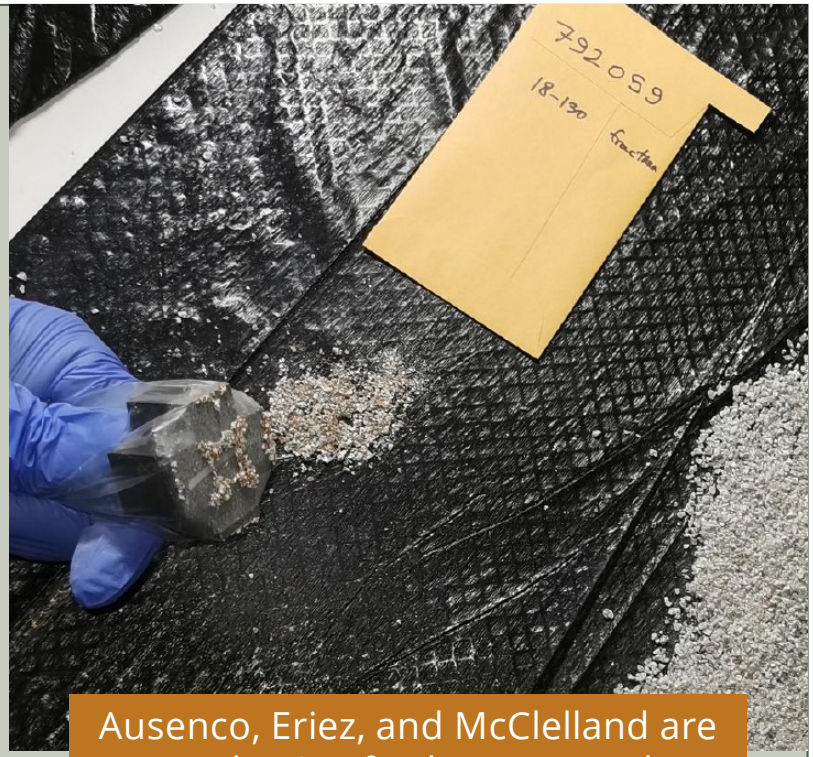
1970s test work showed that gravity separation could recover tin and tungsten from the near-surface limestone-skarn

Initial petrography and thin section work was completed in March 2023; an additional 63 samples from 2023 core are in progress

Mineralogical work demonstrated that most of Lost River's lithium is contained in zinnwaldite, most tin is in cassiterite, and most tungsten is in wolframite and scheelite

Initial laboratory scale test work on granite reports that:

- ✓ Floatation and magnetic separation recovers more than 90% of the lithium and produces a zinnwaldite rougher concentrate containing ≈2.5% Li_2O
- ✓ Gravity separation of tin and tungsten minerals recovers around 90% of both with upgrade ratios of up to 25, achieved at intermediate size fractions



Ausenco, Eriez, and McClelland are conducting further test work

Environmental

In 2023, LRM began the environmental studies crucial to timely permitting:

Hydrogeologic investigations to initiate groundwater model development for predicting future mine inflow quantity and water quality

Wetlands delineation to support future permitting and site layout

Freshwater biomonitoring to establish fish presence, invertebrate taxa, and periphyton in streams as a measure of ecosystem health

Freshwater baseline sampling to establish background water quality

Cultural Resource survey to document historic or archeological use of the area, including the mining history

Phase I and II Environmental Site Assessment to document any areas of concern left by legacy mining

Looking toward Zone 1

Defense Production Act White Paper

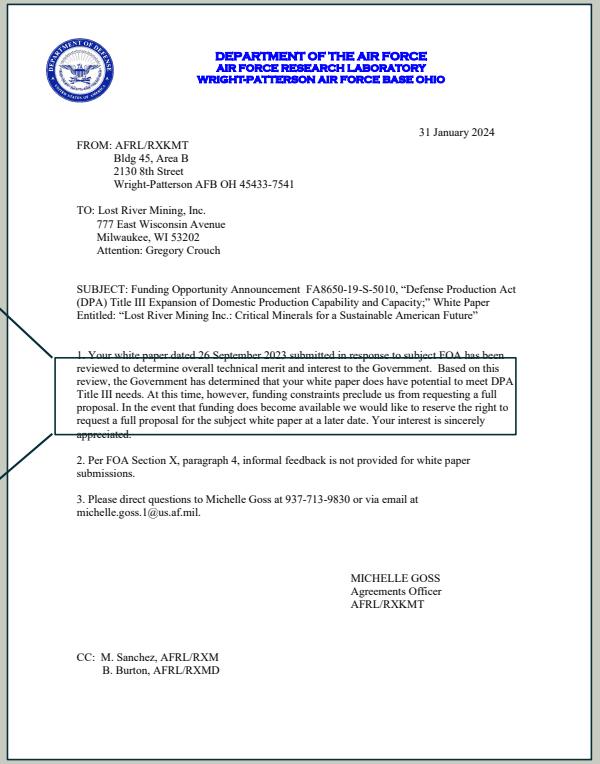
On September 26, 2023, LRM submitted a white paper soliciting $39.8M of support from the Defense Production Act Title III program

The Department of Defense ("DOD") favorably reviewed of our white paper on January 31, 2024:

... Based on this review, the Government has determined that your white paper does have potential to meet DPA Title III needs. At this time, however, funding constraints preclude us from requesting a full proposal. In the event that funding does become available we would like to reserve the right to request a full proposal...

When requested by the DOD, LRM will submit a full technical proposal. LRM is working through Alaska's congressional delegation to remove the DOD's funding constraints

If our application is successful, a DPA grant will greatly reduce the cost and amount of private capital required to advance Lost River through feasibility



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE OHIO

31 January 2024

FROM: AFRL/RXKMT
Bldg 45, Area B
2130 8th Street
Wright-Patterson AFB OH 45433-7541

TO: Lost River Mining, Inc.
777 East Wisconsin Avenue
Milwaukee, WI 53202
Attention: Gregory Crouch

SUBJECT: Funding Opportunity Announcement FA8650-19-S-5010, "Defense Production Act (DPA) Title III Expansion of Domestic Production Capability and Capacity;" White Paper Entitled: "Lost River Mining Inc.: Critical Minerals for a Sustainable American Future"

1. Your white paper dated 26 September 2023 submitted in response to subject FOA has been reviewed to determine overall technical merit and interest to the Government. Based on this review, the Government has determined that your white paper does have potential to meet DPA Title III needs. At this time, however, funding constraints preclude us from requesting a full proposal. In the event that funding does become available we would like to reserve the right to request a full proposal for the subject white paper at a later date. Your interest is sincerely appreciated.

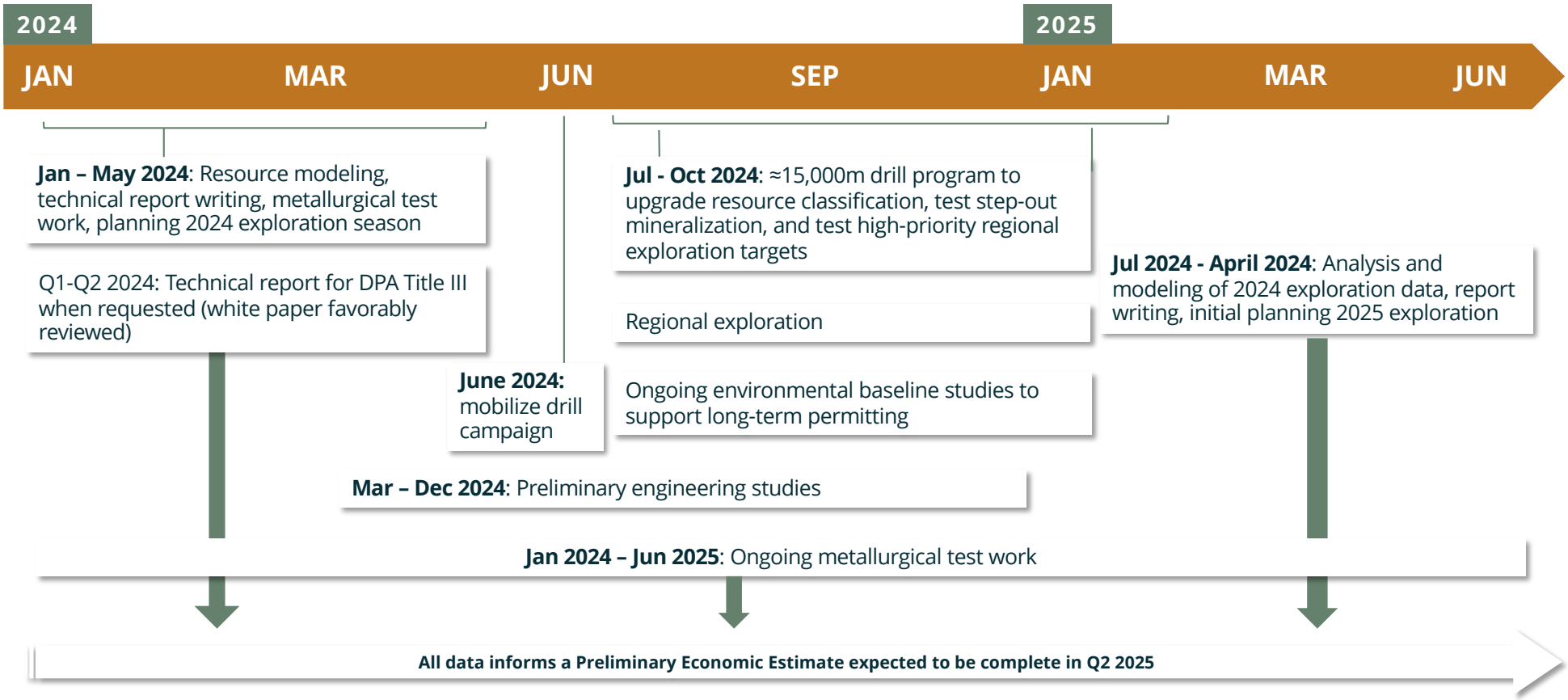
2. Per FOA Section X, paragraph 4, informal feedback is not provided for white paper submissions.

3. Please direct questions to Michelle Goss at 937-713-9830 or via email at michelle.goss.1@us.af.mil.

MICHELLE GOSS
Agreements Officer
AFRL/RXKMT

CC: M. Sanchez, AFRL/RXM
B. Burton, AFRL/RXMD

2024-2025 Work Program



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Supports U.S. Government policy and strategy

[1] Karl, N.A., Burger, M.H., and Long, K.R., 2018, Tin Deposits in the United States: U.S. Geological Survey data release, https://doi.org/10.5066/P97JYNJL; no resources or reserves have been declared, and there are no guarantees that development into a mine will occur or that such development will result in the commercial extraction of mineral deposits