



Building America's Uranium Resources

March 2023



Cautionary Statement

Investors are cautioned that, except for statements of historical fact, certain information contained in this document includes "forward-looking information", with respect to a performance expectation for Nuclear Fuels Inc., (the "Company") Such forward-looking statements are based on current expectations, estimates and projections formulated using assumptions believed to be reasonable and involving a number of risks and uncertainties which could cause actual results to differ materially from those anticipated.

Such factors include, without limitation, fluctuations in foreign exchange markets, the price of commodities in both the cash market and futures market, changes in legislation, taxation, controls and regulations of national and local governments and political and economic developments in Canada and other countries where the Company carries-out or may carry-out business in the future, the availability of future business opportunities and the ability to successfully integrate acquisitions or operational difficulties related to technical activities of mining and reclamation, the speculative nature of exploration and development of mineral deposits located, including risks in obtaining necessary licenses and permits, reducing the quantity or grade of reserves, adverse changes in credit ratings, and the challenge of title.

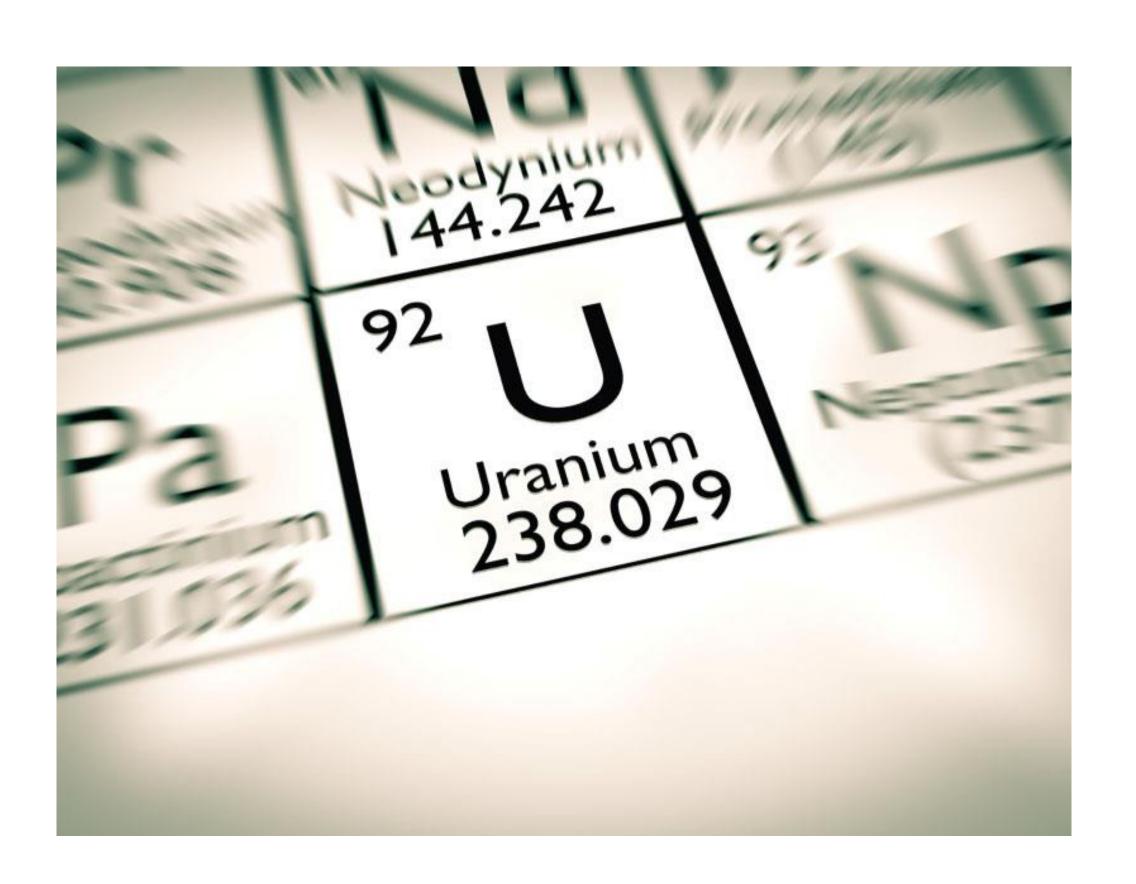
The Company does not undertake an obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.

Michael Collins P.Geo., (permit # 1003770) Director and CEO of the Company., is a registered professional geoscientist as defined by National Instrument 43-101. Mr. Collins has reviewed and approved the technical portion of this corporate presentation.



Corporate Overview:

Building District-Scale Uranium and Rare Earths Projects in North America



- Advancing Canadian and US projects with high grade uranium and rare earth elements (REE);
- Developing US focused district-sized uranium projects with known current and historical 43-101 uranium resources;
- Largest uranium exploration project in the premiere In-Situ Recovery (ISR) state: Wyoming, USA;
- Experienced public company management; technical expertise in uranium;
- Unique exploration model providing a pathway to production with enCore Energy backing development and future production.





Proforma Share Structure

| Shares - Issued and Outstanding | 33,183,150 |
|---------------------------------|-------------|
| Warrants | 0 |
| Options @ \$0.25 | 1,900,000 |
| Allocated to RTO | 4,426,320 |
| enCore 19.9% | 9,350,000 |
| Fully Diluted | 48,859,470 |
| Cash (CDN) | \$7,000,000 |

- Largest shareholder: enCore Energy (19.9% ownership following go-public transaction).
- Strong shareholder base with investors participating in multiple financings.
- Management/Insiders hold ~10% of common shares.

Board of Directors and Management





Michael Collins P.Geo., Director and Chief Executive Officer

With 15+ years of public market experience, Michael founded Bluerock Resources which was the only new uranium producer in the 2000-2008 uranium cycle in the US southwest. Michael also has a depth of experience in permitting and feasibility studies, managing development projects and mine optimization programs.



William Sheriff, Director (enCore Nominee)

Mr. Sheriff is the founder and presently serves as the Executive Chair of enCore Energy Corp., a leader in in-situ recovery uranium development. Mr. Sheriff was a pioneer in the uranium renaissance as co-founder and Chairman of Energy Metals Corp., which was acquired by Uranium One for \$1.8B and owns the largest domestic uranium resource base in US history.



David Miller, Director

Mr. Miller is a businessman, professional economic geologist, and a past member of the Wyoming State Legislature. Mr. Miller previously served as the Chief Executive Officer of Strathmore Minerals Corp. prior to its merger with Energy Fuels in 2013. His career has spanned over 40 years that started with Utah International in the United States, which evolved into Orana Group, the French nuclear power conglomerate.



Monty Sutton, Chief Financial Officer

A CFO & Senior Management Accountant, Mr. Sutton spent 15 years as investment advisor, trader, and insurance specialist with PI Financial Corp. in Vancouver raising over \$100 million for junior companies.



Eugene Spiering, Director (enCore nominee)

Mr. Spiering is a registered geologist with over 30 years experience and recently served as VP Exploration for Quaterra Resources where he led the discovery of the only two uranium deposits in Arizona. Mr. Spiering's worked on the Kaycee Uranium District in the early 1980's.



Mark Travis, CPG, Project Manager

Mr. Travis has 17 years of mineral industry experience in a variety of different settings including both energy and precious metals. Mr. Travis was instrumental in the Strathmore Minerals development of the Gas Hills Wyoming properties during the 2006-2013 Uranium cycle. Mr. Travis is Director of both the Geological Society of Nevada as well as the Nevada Mineral Exploration Coalition and is a Certified Professional Geologist through AIPG.





Canada and U.S. Projects

Labrador: Rare Earth/Uranium

- Vast mineral license extending 112 km along trend;
- Uranium values to 6.7% -Highly enriched in high-value heavy rare earth elements such as neodymium and dysprosium.

Wyoming: Proven ISR* Uranium Districts

- Largest current uranium resources of any state;
- Proven and effective ISR uranium permitting jurisdiction;
- Agreement State (with Nuclear Regulatory Commission) provides for "one-window" streamlined permitting of new uranium projects.

Arizona: Advanced ISR Project

- Current NI-43-101 Measured Resource of 757,000 tons @ 0.14% U_3O_8 containing 2.52 million pounds of $U_3O_8^{-1}$;
- Excellent expansion possibilities along known trend.



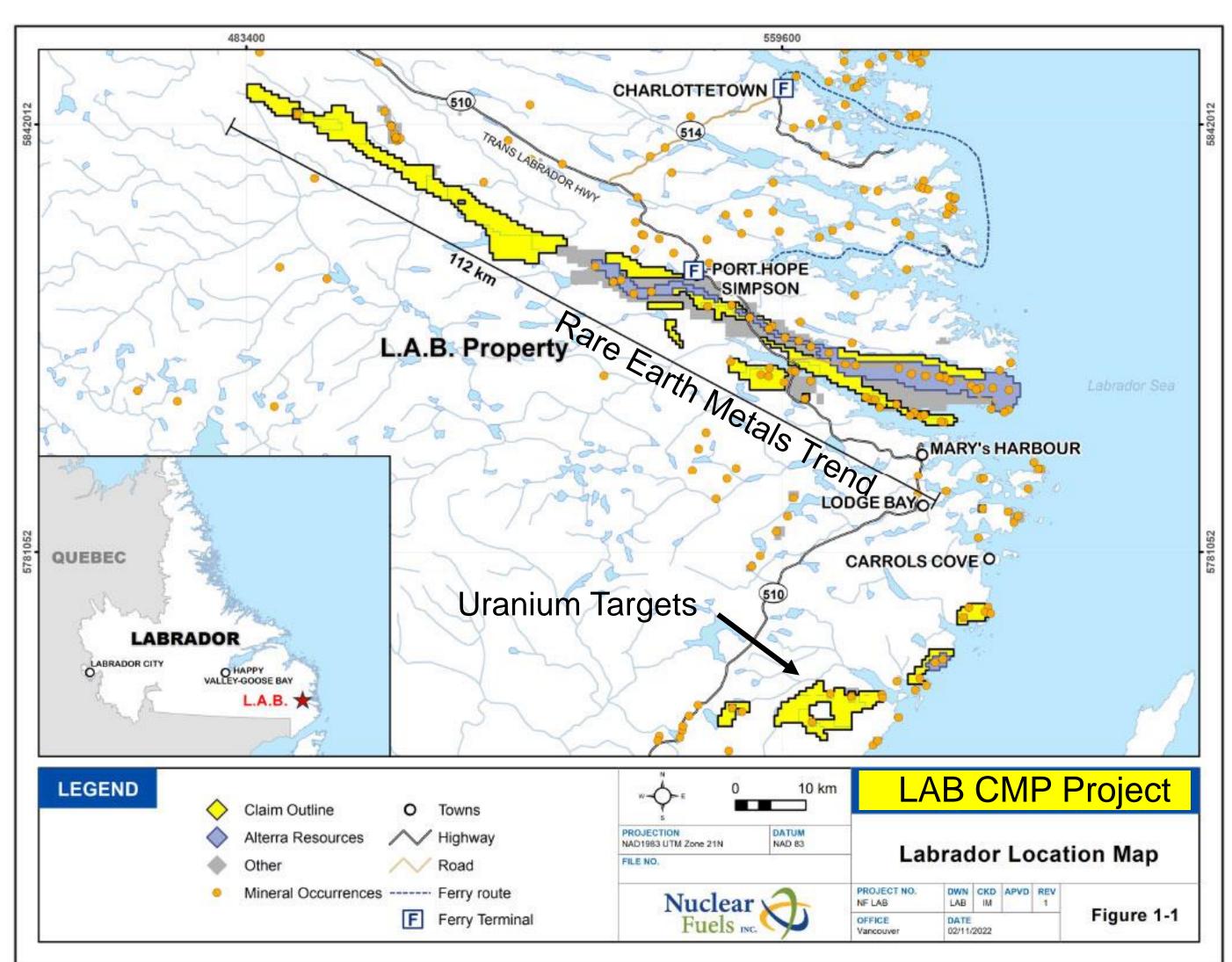
^{*} ISR - In-Situ Recovery: Proven extraction process



L.A.B. Critical Metals Project, Labrador

- District-scale potential with numerous highlyenriched occurrences along 112km trend;
- Uranium values to 6.7% with no follow up on discovery;
- Adjacent to Search Minerals rare earth elements (REE) project with a Preliminary Economic Assessment⁴:
 - After tax Net Present Value of \$1.3Bn;
 - Internal Rate of Return of 41%;
 - Demonstrating metallurgical viability at a pilot plant level.

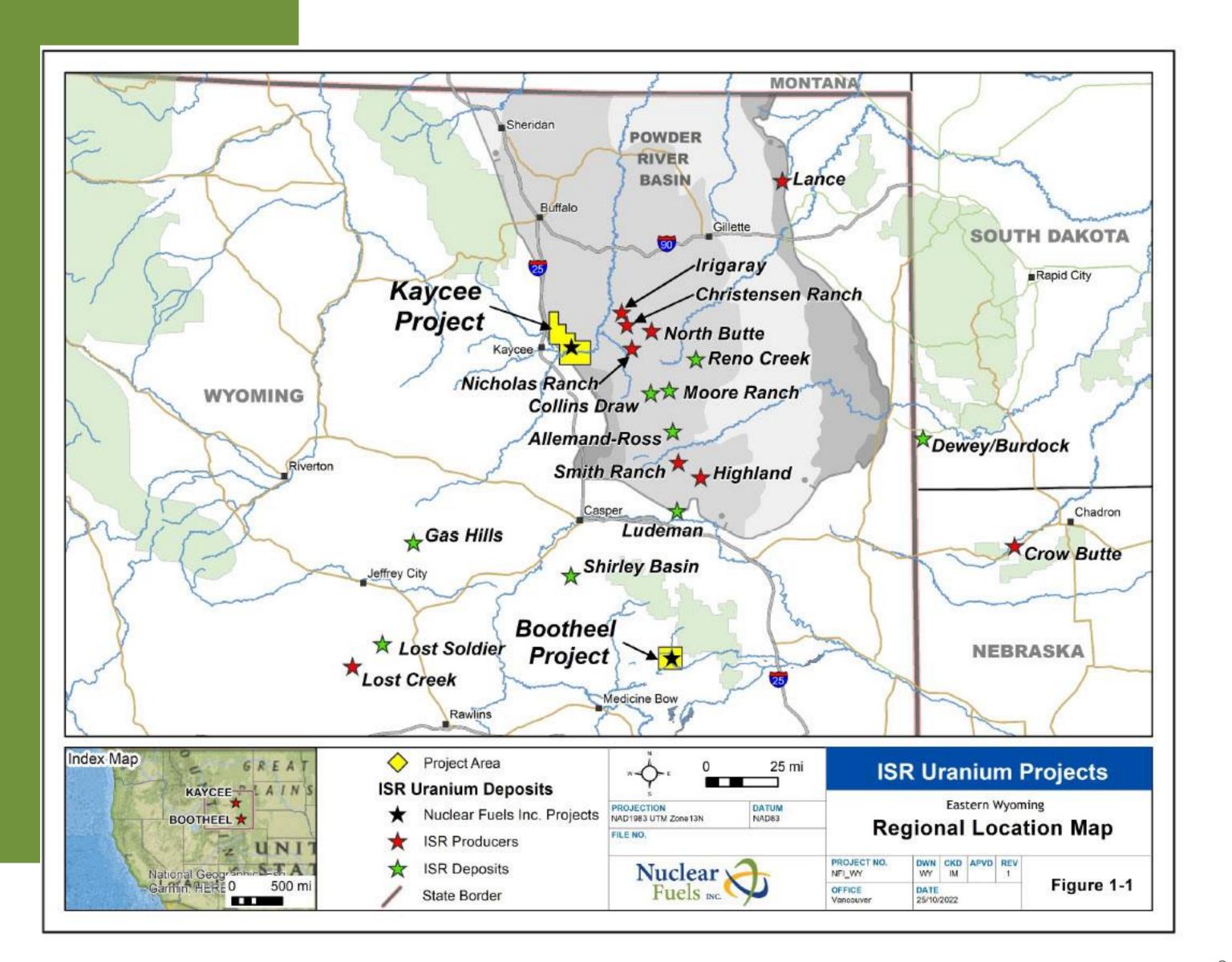
Exploration results on adjacent projects and geologically similar projects are not necessarily indicative of the mineral potential of Nuclear Fuels' claims.





Wyoming: America's Leading ISR State

- Proven & prolific uranium producer since 1950's;
- The Powder River Basin hosts the majority of the ISR projects in the state;
- Pro energy development government at the state and local levels;
- At least 10 ISR operations have produced tens of millions of pounds of U_3O_{8}

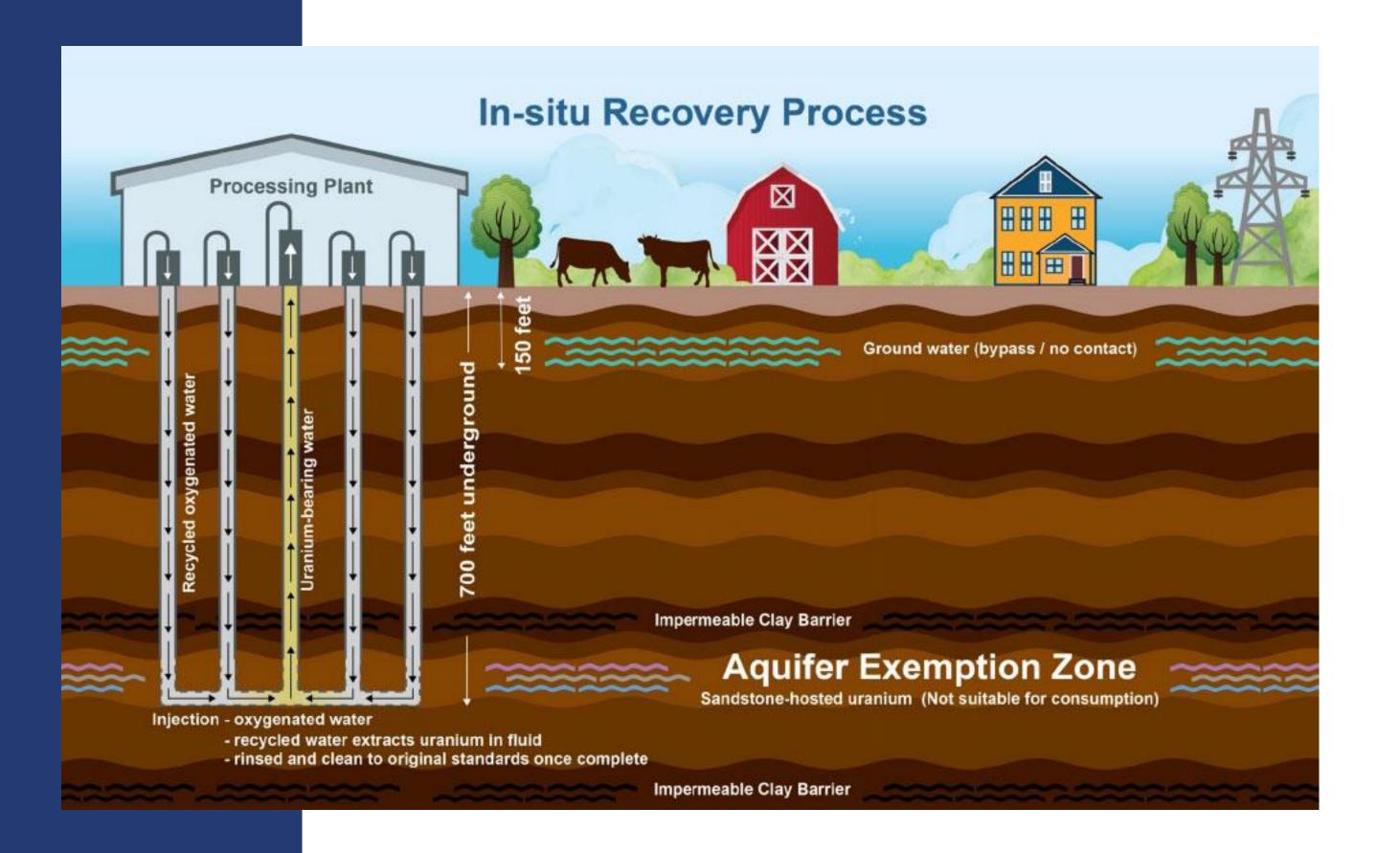




What is In-Situ Recovery "ISR"

Environmentally-responsible and economically superior uranium extraction.

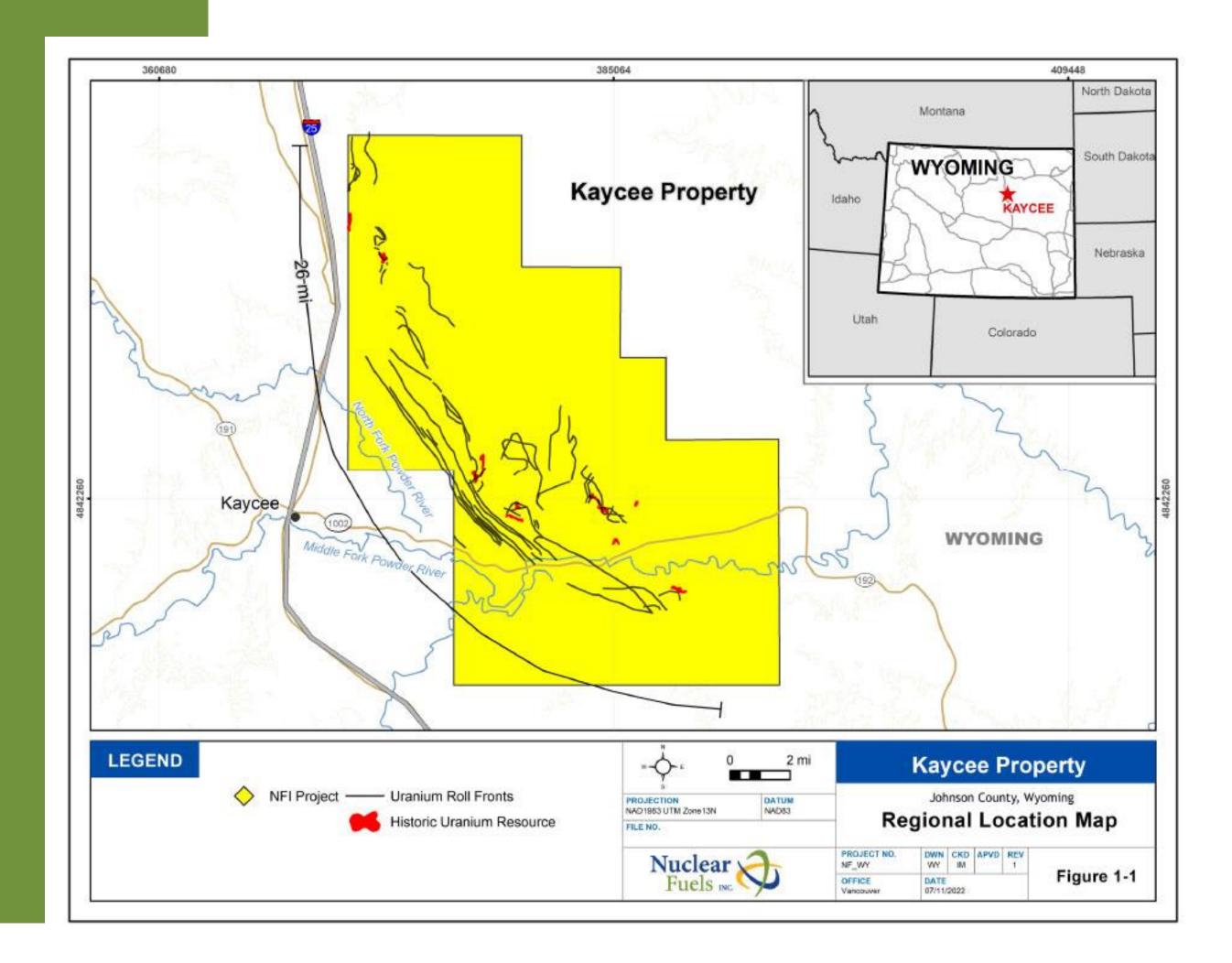
- Over 50% of all uranium extraction globally is ISR;
- Extraction of uranium in liquid form through injection and recovery wells;
- No toxic chemicals used; oxygen injected with water;
- Substantial water use savings compared to conventional mining;
- Minimal surface disruption, no tailings, no waste piles;
- Land and water reverts to original use category once extraction completed.





Kaycee Project, Wyoming

- 1st time in modern history that the entire project is controlled by a single company;
- 26 mile trend with over 110 miles of identified roll fronts⁵;
- With over 3,700 drill holes, drilling has confirmed uranium mineralization in three stratigraphic units over more than 1000' in total thickness;
- Total historic resources of 1.7mm pounds uranium;⁶
 - Largest resource of 519,000 lbs @ 0.138% U₃O₈;
 - Average radiometric grade above $0.10\% U_3O_8$.

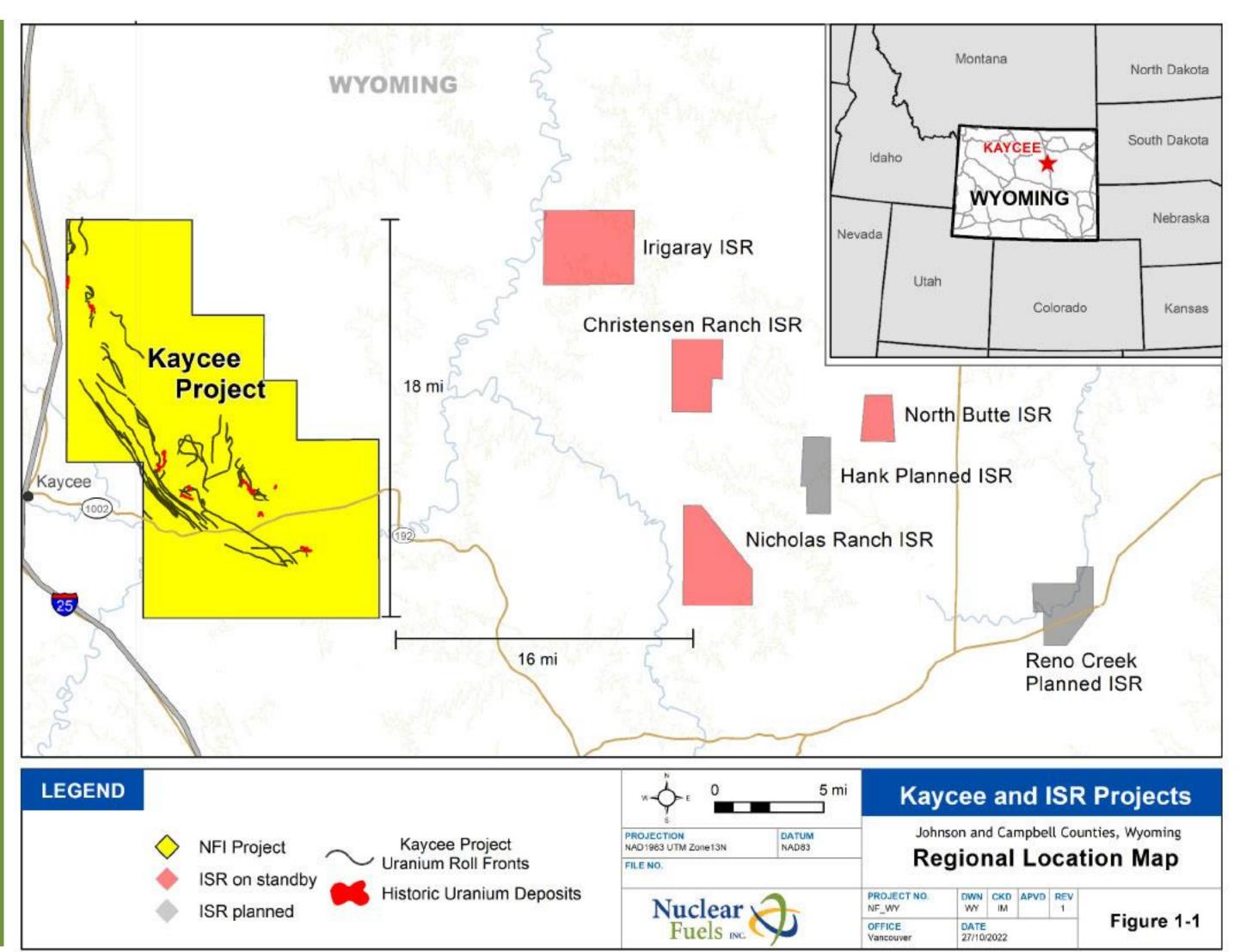


^{*}A Qualified Person (as defined in NI 43-101) has not done sufficient work to classify the historical estimate as a current mineral resource. Additional work will be required to verify and update historical estimates, including a review of assumptions, parameters, methods and testing. Historical estimates do not use the current mineral resources categories prescribed under NI 43-101. Nuclear Fuels is not treating the historical estimate as a current mineral resource and it should not be relied upon.



Kaycee Project, Wyoming

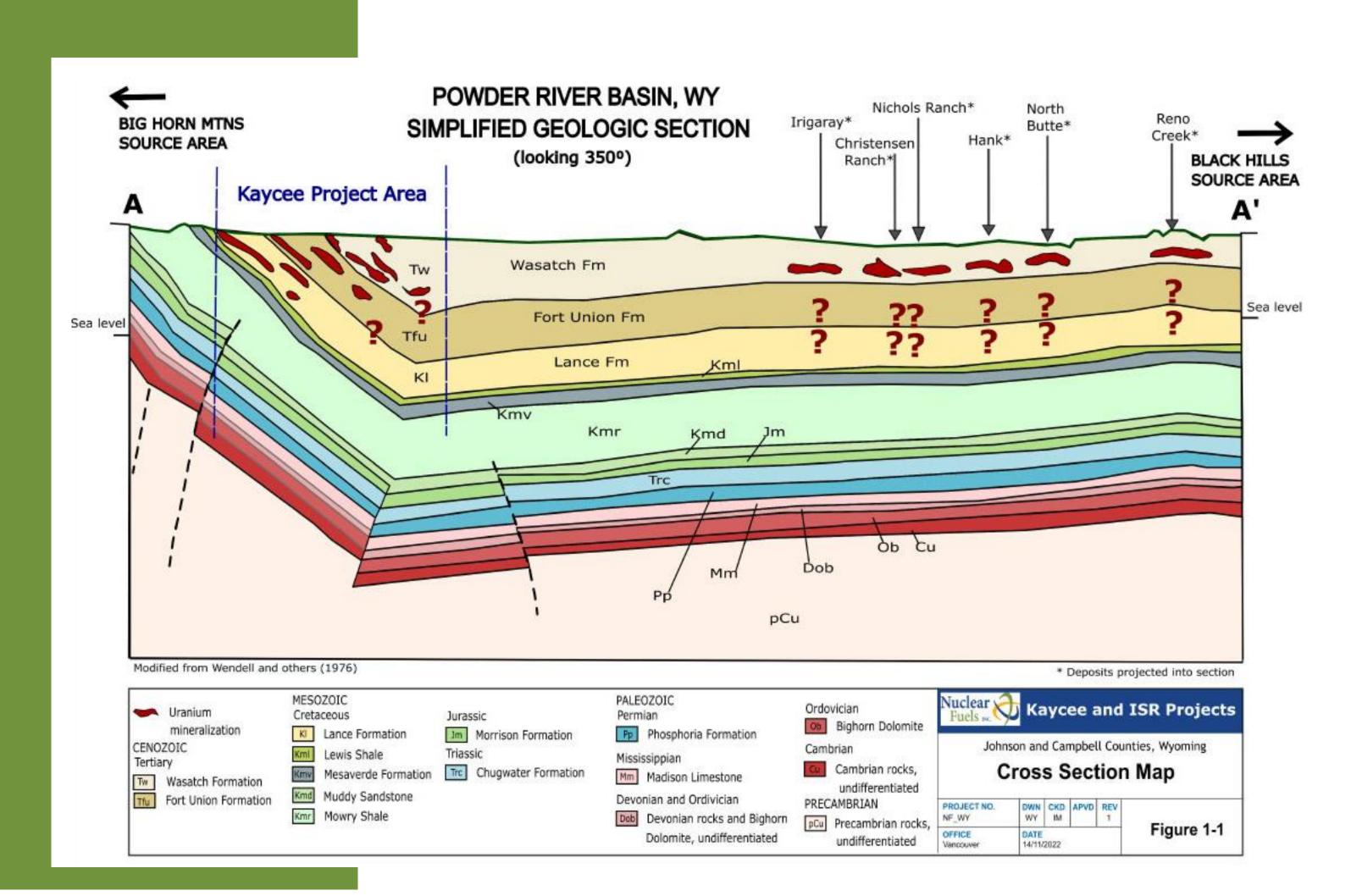
- Several ISR operations throughout the Powder River Basin have produced from any one of the three formations;
- Majority of trend not well-explored, early drilling concentrated along approximately 10% of trends;
- No significant exploration since 1983;
- enCore retains back-in right for 51% by paying 2.5x exploration expenditures and carrying to production.





Wyoming: Kaycee Project Cross-Section

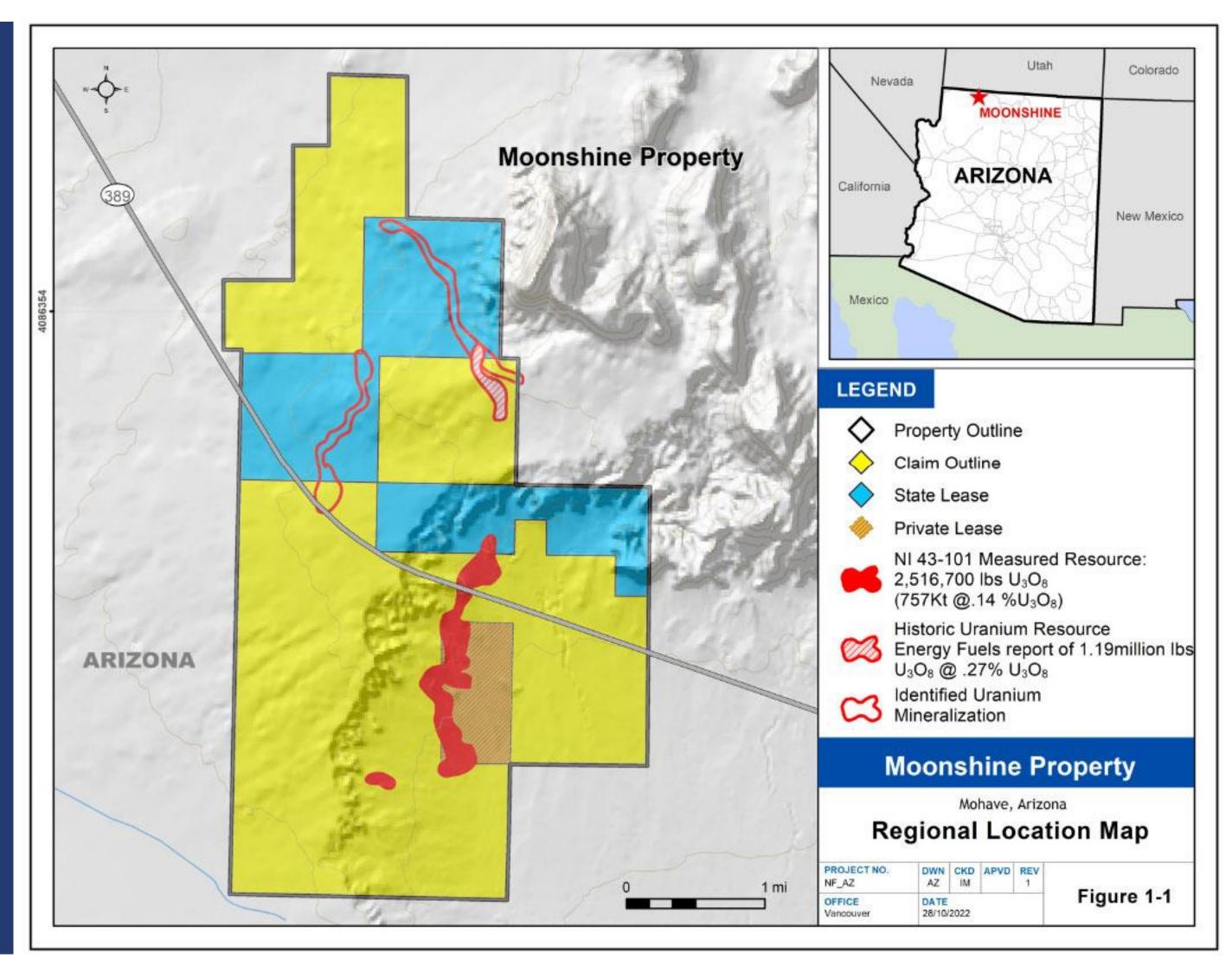
- Primary exploration focus in Wyoming; very large project occupies the western limb of the Powder River Basin;
- Testing in early 1980's established ISR amenability in the Wasatch, Fort Union and Lance formations;
- Believed to be the only project where all three formations are mineralized and amenable to ISR extraction.





Moonshine Project, Arizona

- NI 43-101 resource of 2.52 million pounds of U_3O_8 (757,000 tons @ 0.14% $U_3O_8^{)1}$;
- Additional historic resource of 1.19 million pounds of U_3O_8 ;
- Amenable to ISR extraction process;
- 3-mile trend of uranium mineralization identified with sparse drilling, provides targets for a significant increase in resources;
- High grade results for ISR when compared to peers, typical results range from 0.04 to 0.07% U_3O_8 .

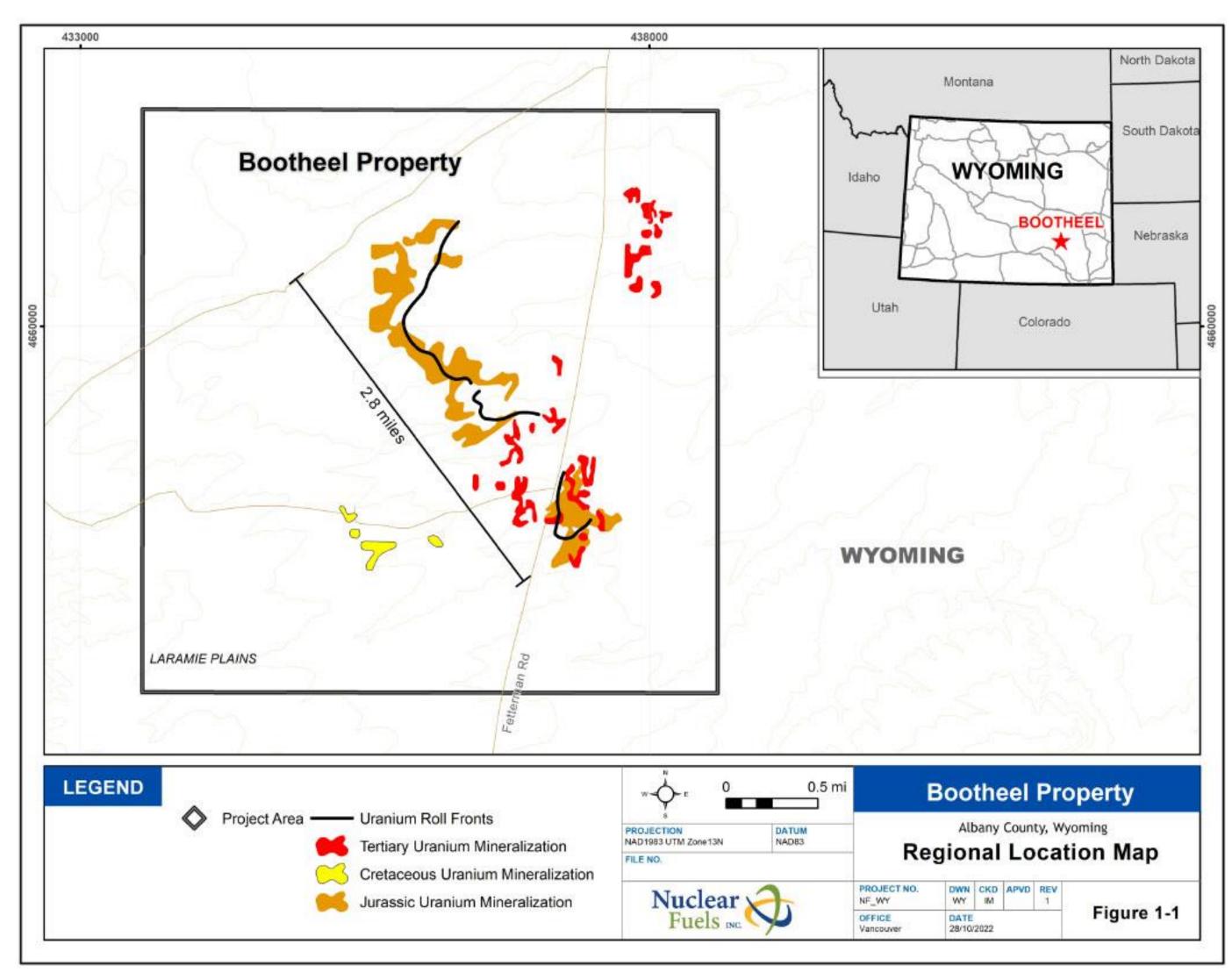


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Bootheel Project, Wyoming

- Roll-front mineralization occurs in three ages of sandstone;
- Mineralization is amenable to ISR extraction;
- Historic NI 43-101 Report⁷:
 - Indicated Resource of 1.443 million tons @ 0.038% U₃O₈ for 1.089;
 - Inferred Resource of 4.399 million tons @ 0.037% for $3.249~\rm U_3O_8$.



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2023 Work Plan

L.A.B. Critical Metals Project, Labrador, Canada

Ground truth and define high-grade rare earth elements and uranium targets on both claim groups

Kaycee Project, Wyoming, USA

Compile and model 3,000+ drill hole database to establish high priority drill targets; Initial drill testing through lower mineralized horizon (Lance Formation); Select core drilling for confirmatory and advanced ISR amenability and private parcel leasing

Moonshine Springs, Arizona, USA

Data compilation; permitting and initial drilling on State Leases to expand resource base

Bootheel Project, Wyoming, USA

Data compilation and evaluation, private parcel leasing

Total 2023 Budget

\$7.5mm CDN

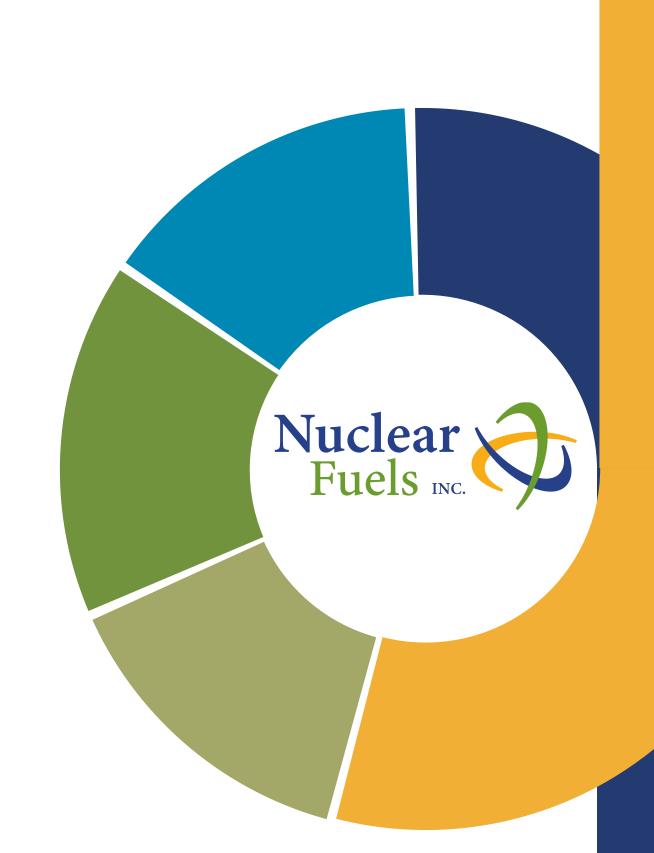




Investment Summary



- Increasing demand for ISR uranium resources in the US;
- Management team with proven uranium industry experts;
- Access to proprietary, privately held database created opportunity to compile entire district;
- Go-public announcement in 2023; completion Q1/2023;
- Pathway to production on proving a minimum
 15mm lb uranium resource.





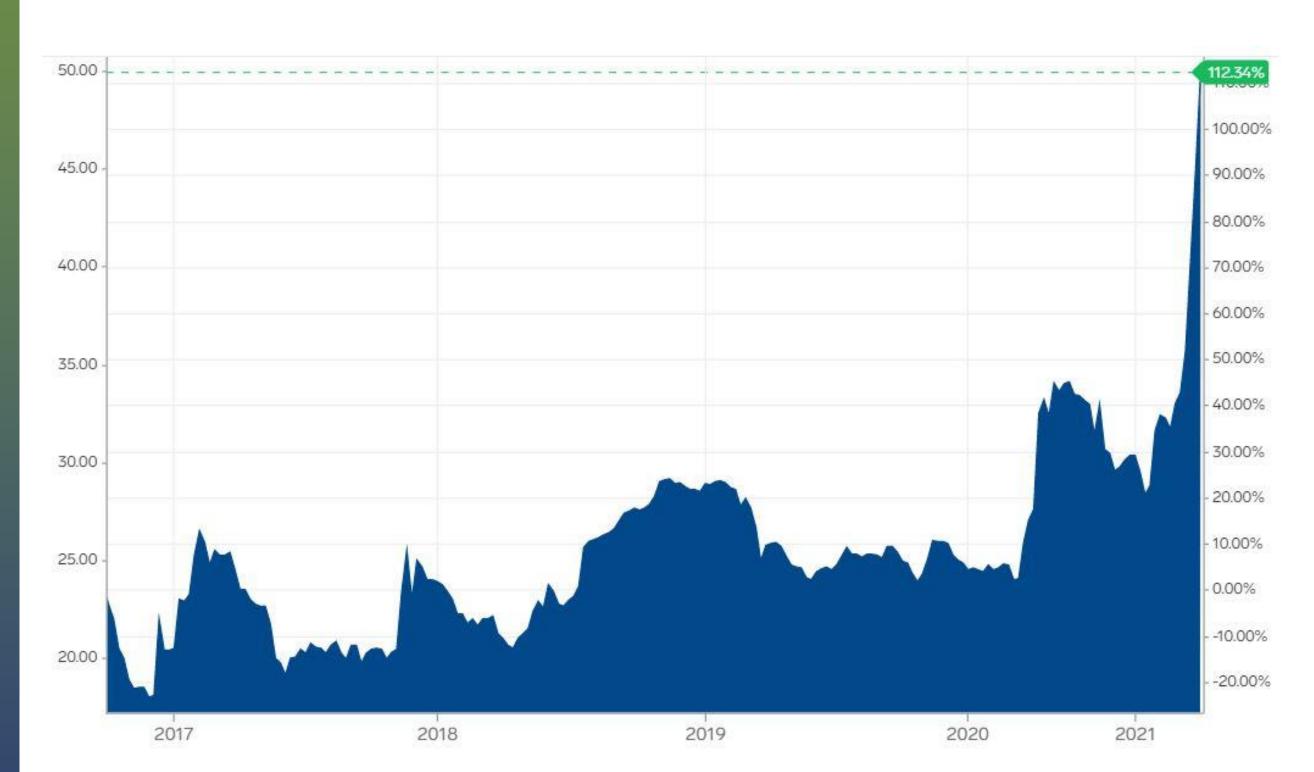
Addressing Uranium & Critical Metals Demand

Building America's Uranium Resources

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Why Nuclear Now



Uranium Demand: Nuclear Energy Requirements



The only carbon-free & scalable source of energy available 24/7/365.



Nuclear energy is a viable and affordable energy source available domestically.



Nuclear energy is the largest source of carbon-free electricity in the United States and protects our air quality by generating electricity without other harmful pollutants.



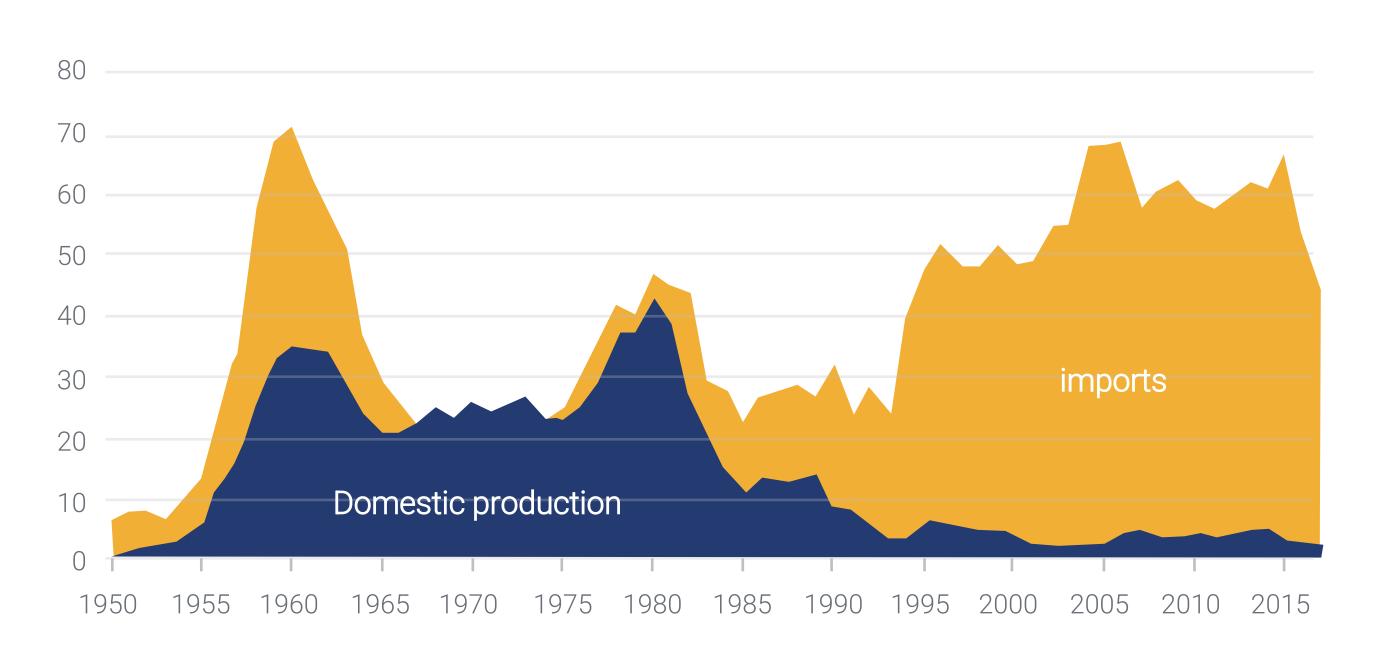
Domestic resource reduces reliance on foreign producers amid an energy crisis.



Uranium Sector Renaissance

U.S. uranium supply to commercial nuclear reactors (1950-2017)





Domestic Supply Needs

60% of US uranium flows through Russia and is "no longer a trustworthy source of our fuel, and we need to find alternatives here and build up that supply chain" (Kerry Huff, Asst Secretary of Energy).

Bi-Partisan Support

Bi-partisan Infrastructure Law: \$6Bn Nuclear Credit Program.

Inflation Reduction Law provides \$700 million for the nuclear power industry advance reactor design and fuel.



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- 1. NI-43-101 Technical Report PENDING
- 2. Moran, C 2012:Second year assessment report on prospecting and geochemical, geophysical and trenching exploration for license 17333M on claims in the St Lewis Inlet area, southeastern Labrador. Search Minerals and Alterra Resources Incorporated. Newfoundland and Labrador Geological Survey, Assessment File 13A/08/0087, 2012, 799 pages.NTS:13A
- 3. Susan Alexander, s., Mac Gillivray G., Dimmell P., Silver Spruce Resources Inc. 2008 assessment Report, Straits Property. NL Geoscience reference LAB1505
- 4. Search Minerals website, https://searchminerals.ca/projects/technical-reports/ -July 18, 2022
- 5. Spiering, Eugene D., 1983, Geologic Report on the 1983 Mapping Program of the Kaycee Uranium Project: Private Company Report, 79p., 27 pl.
- 6. Fruchey, R., A., 1982, Kaycee Geologic Report for Washtenaw Energy Corporation and Midwest Energy Resources Co. Internal report.
- 7. Underhill, Douglas H. and Roscoe, William E., 2009, Technical Report on the Bootheel Uranium Property, Shirley Basin Mining District, Albany County, Wyoming *by* Scott Wilson Roscoe Postle Associates Inc.: Crosshair Exploration & Mining Corp. and UR Energy Inc., 127 p.