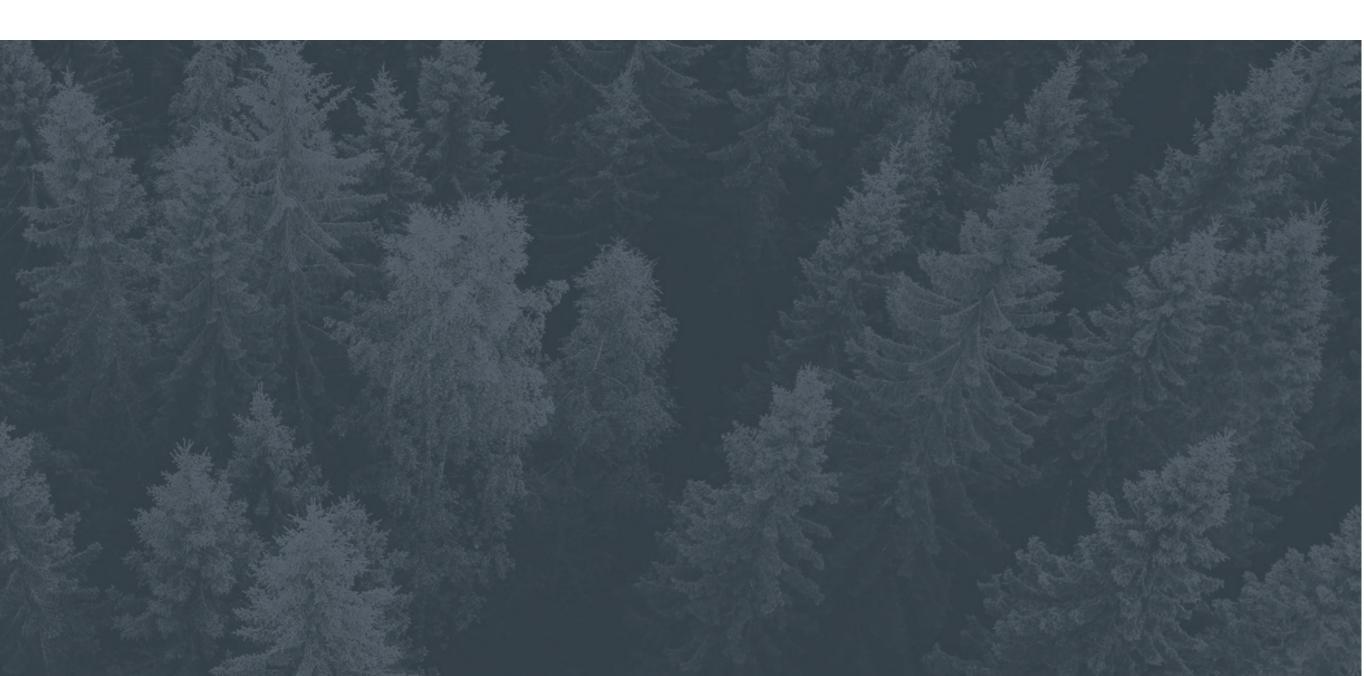


## Uranium Development & Exploration The Wheeler River Project

February, 2021 Community, Leadership and High School Workshops



## **Penison Mines**

This community meeting was planned in collaboration with the Mayor of the Northern Village of Beauval to provide information and seek feedback with respect to Denison's proposed Wheeler River Project. **This is a public meeting** which is open to all residents of the Village and surrounding areas.

Denison respects the Delegation of the Duty to Consult Responsibilities signed by the Métis Local Presidents in August 2019, delegating consultation matters to the Métis Nation-Saskatchewan (MNS). In accordance with that delegation, Denison has been requested to direct all local Métis-related consultation to the MNS leadership and designated negotiators.

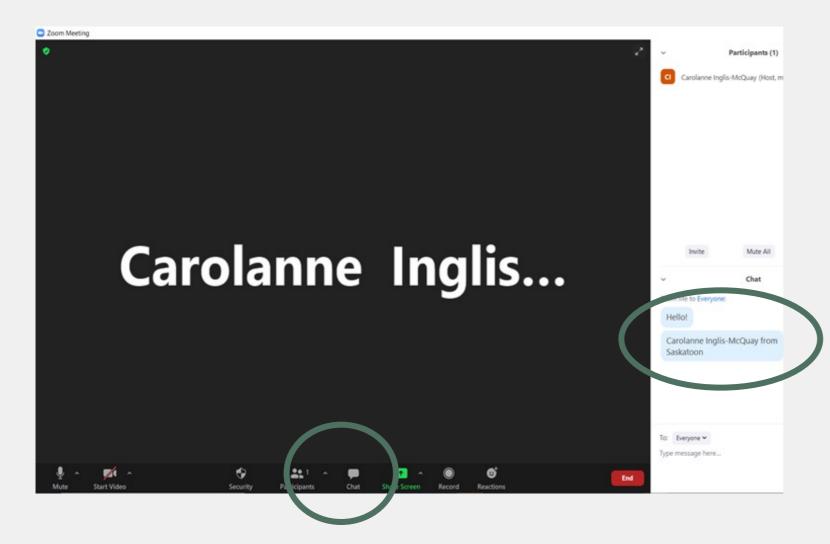
Denison has been working with MNS to arrange separate meetings with Métis leadership and Citizens to understand the distinct interests of the Métis in respect of the project.

## Agenda

- Opening
- How to Use Zoom
- 'Virtual' Meal Support to the High Schools
- Introductions (Denison, Province, CNSC)
- Wheeler River Project Overview
- Door prize draws and entertainment
- Environmental Assessment Process
- Valued Components
- Questions and Answers
- Next Steps from Denison
- Final door prize draws and entertainment



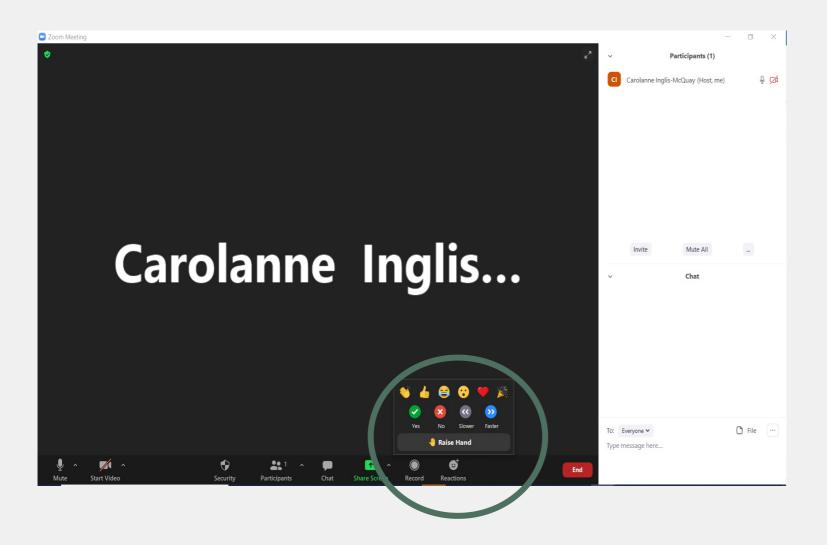
### How to Participate using Zoom Features



#### **Chat and Video Function**

- Enter your name and community in the chat function if you'd like to be entered to win a prize for attendance
- The chat function is also where we will have you answer questions we pose throughout the presentation to be entered to win a prize for participation
- The chat function is a place to ask us questions, as the microphones will be muted
- Video you can turn your video on or off (video off often improves quality of video conference)

### How to Participate using Zoom Features



#### **Reactions Function**

 You can give us feedback as we go along to let us know if the presentation is too fast, too slow, going well

### **Cautionary Statements & References**



This presentation and the information contained herein is designed to help you understand management's current views, and may not be appropriate for other purposes. This presentation contains information relating to the uranium market, third party and provincial infrastructure, and the plans and availability thereof, derived from third-party publications and reports which Denison believes are reliable but have not been independently verified by the Company.

Certain information contained in this presentation constitutes "forward-looking information", within the meaning of the United States Private Securities Litigation Reform Act of 1995 and similar Canadian legislation concerning the business, operations and financial performance and condition of Denison. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or the negatives and / or variations of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to". In particular, this presentation contains forward-looking information pertaining to the results of, and estimates, assumptions and projections provided in, the Wheeler PFS and the Waterbury PEA, including future development methods and plans, market prices, costs and capital expenditures; assumptions regarding Denison's ability to obtain all necessary regulatory approvals to commence development at Wheeler; Denison's percentage interest in its projects and its agreements with its joint venture partners; and the availability of services to be provided by third parties. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions that the mineral resources described can be profitably produced in the future.

Forward looking statements are based on the opinions and estimates of management as of the date such statements are made, and they are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Denison to be materially different from those expressed or implied by such forward-looking statements. Denison faces certain risks, including the current and potential impacts of the COVID-19 pandemic, use of mining methods which are novel and untested in the Athabasca basin, the inability to permit or develop its projects as currently planned, the inability to secure sufficient financing to pursue its business objectives, the unpredictability of market prices, events that could materially increase costs, changes in the regulatory environment governing the project lands, and unanticipated claims against title and rights to the project. Denison believes that the expectations reflected in this forward-looking information are reasonable but there can be no assurance that such statements will prove to be accurate and may differ materially from those anticipated in this forward-looking events, please refer to the "Risk Factors" in Denison's Annual Information Form dated March 13, 2020 available under its profile at www.sedar.com and its Form 40-F available at www.sec.gov/edgar.shtml. These factors are not, and should not be construed as being exhaustive.

**Readers should not place undue reliance on forward-looking statements.** The forward-looking information contained in this presentation is expressly qualified by this cautionary statement. Any forward-looking information and the assumptions made with respect thereto speaks only as of February 8, 2021. Denison does not undertake any obligation to publicly update or revise any forward-looking information after such date to conform such information to actual results or to changes in its expectations except as otherwise required by applicable legislation.

**Cautionary Note to United States Investors Concerning Estimates of Mineral Resources and Mineral Reserves:** This presentation may use terms such as "measured", "indicated" and/or "inferred" mineral resources and "proven" or "probable" mineral reserves, which are terms defined with reference to the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") CIM Definition Standards on Mineral Resources and Mineral Reserves ("CIM Standards"). The Company's descriptions of its projects using CIM Standards may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

#### **Qualified Persons**

The disclosure of a scientific or technical nature within this presentation, including the disclosure of mineral resources, mineral reserves, as well as the results of the Wheeler PFS and Waterbury PEA, was reviewed and approved by David Bronkhorst, P.Eng., who is a Qualified Person in accordance with the requirements of NI 43-101.

#### **Technical Reports**

- For further details regarding the Wheeler River project, please refer to (a) the Company's press releases dated December 1, 2020, regarding the adoption of the freeze wall design for ISR at Phoenix, and September 24, 2018, regarding the Prefeasibility Study, and (b) the technical report titled "*Prefeasibility Study for the Wheeler River Uranium Project, Saskatchewan, Canada*" with an effective date of September 24, 2018 ("Wheeler PFS").
- For further details regarding the Waterbury Lake project, please refer to the Company's press release dated November 17, 2020 and the technical report titled "Preliminary Economic Assessment for the Tthe Heldeth Túé (J Zone) Deposit, Waterbury Lake Property, Northern Saskatchewan, Canada" with an effective date of October 30, 2020. ("Waterbury PEA"). The Waterbury PEA is a preliminary analysis of the potential viability of the Project's mineral resources, and should not be considered the same as a Pre-Feasibility Study, as various factors are preliminary in nature. There is no certainty that the results from the PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability. Scheduled tonnes and grade do not represent an estimate of mineral reserves.

For a description of the data verification, assay procedures and the quality assurance program and quality control measures applied by Denison, please see Denison's Annual Information Form dated March 13, 2020. Copies of the foregoing are available on Denison's website and under its profile on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.shtml.

### 'Virtual Meal' to Support High School Fundraising





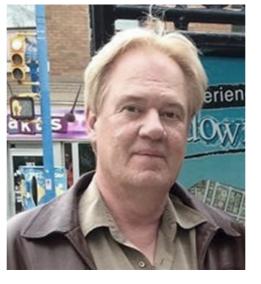
- Denison is proud to make a \$2,500
   donation to the school for a 'virtual' meal to support high school fundraising efforts
- **Thank you** to all staff working so hard in the schools – teachers, janitors, bus vers, librarians, maintenance and ninistration



Penisor

#### Denison Team

- Dave Bronkhorst, VP Operations
- Janna Switzer, Environment Manager
- Chad Sorba, Technical Manager
- Carolanne Inglis-McQuay, CSR Manager
- Xavier Lu Dac, Senior Engineer
- Dana Harris, Project Services Coordinator
- Mike Dawe, Environment and CSR Coordinator
- Jenn Skilnick, Environment Coordinator

















Mr. Aimann Sadik Senior Environmental Assessment Administrator

Ms. Brianne England Manager, Applications

Mr. Jeff Dereniwski Senior Environmental Assessment Administrator

# Government \_\_\_\_\_\_ of \_\_\_\_\_ Saskatchewan

#### Ms. Marcelle Phaneuf Environmental Assessment Specialist

Mr. Doug Wylie Environmental Assessment Specialist



# **CNSC** Mandate

- Regulate the use of nuclear energy and materials to protect health, safety, security and the environment
- Implement Canada's international commitments on the peaceful use of nuclear energy
- Disseminate objective scientific, technical and regulatory information to the public



## **CNSC** Regulates All Nuclear Facilities and Activities



Uranium mines and mills



Nuclear research and educational activities



Uranium fuel fabrication and processing



Transportation of nuclear substances



Nuclear power plants



Nuclear security and safeguards



Nuclear substance



Import and export controls



Industrial and medical applications



# CNSC Staff

- Perform technical assessments and reviews
- Presents staff's assessment findings and recommendations
- Implement Commission decisions
- Conduct compliance inspections and oversight of the licensees facilities and activities
- Verify and enforce compliance with regulatory requirements
- Develop regulatory requirements and guidance
- Engage the public and Indigenous groups through outreach

# Responsibilities

## **CNSC Responsibilities:**

- Make independent, objective, science based and risk-informed decisions
- Set requirements
- Verify compliance

## Licensee Responsibilities:

- Manage regulated activities in a manner that protects health, safety, security and the environment, while respecting Canada's international obligations
- Responsible and accountable for the safe operation of facilities and activities

nuclearsafety.gc.ca

5

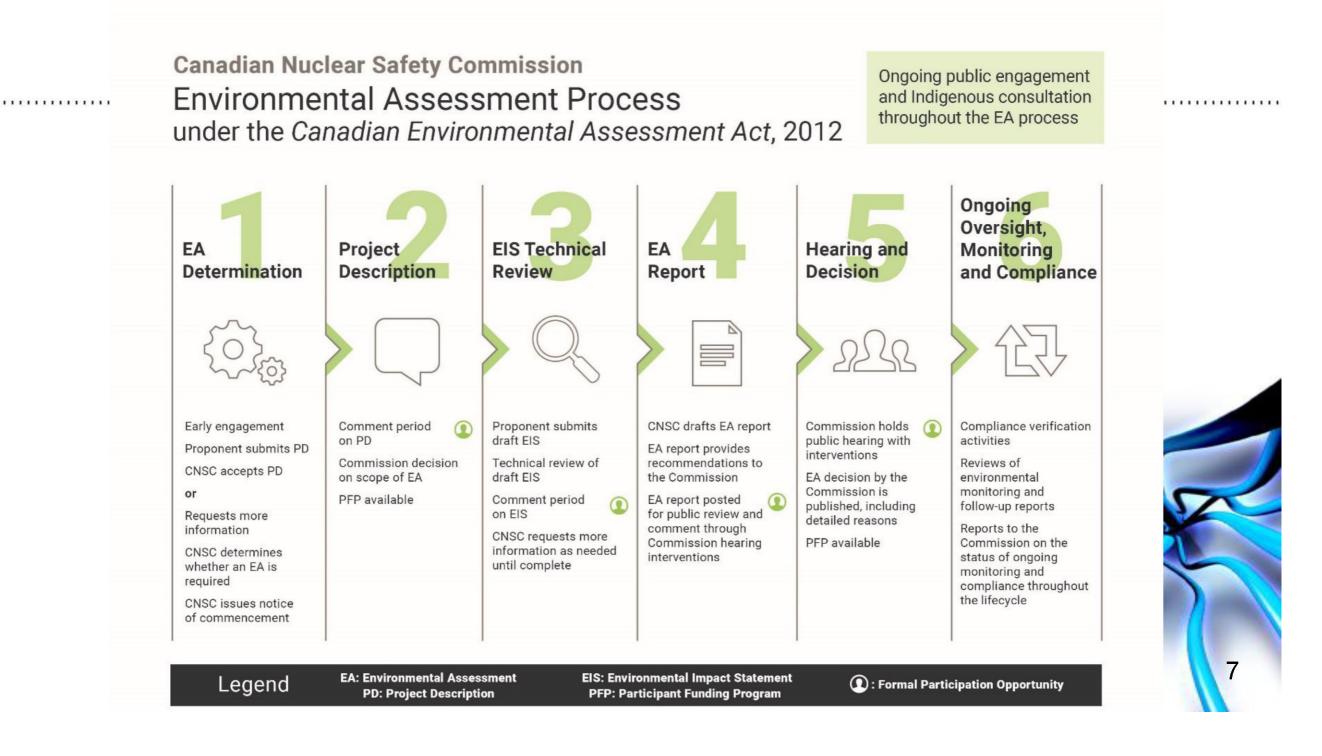
# **Environmental Assessment**

Opportunities for public and Indigenous consultation are continuous

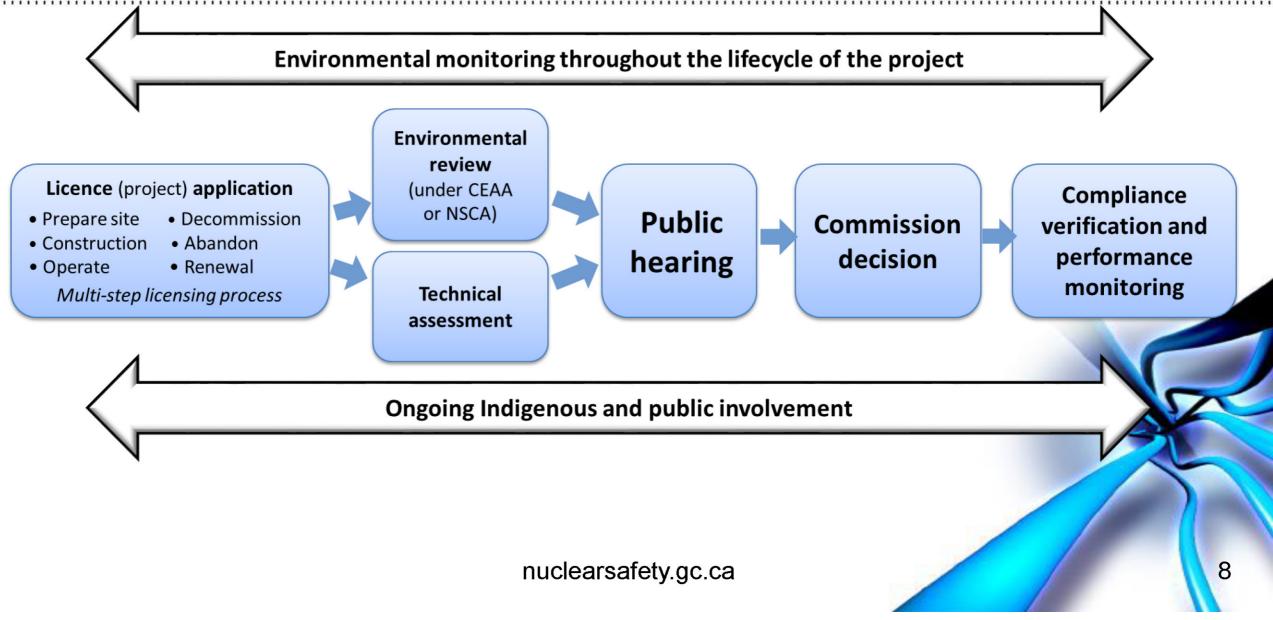
Federal and provincial agencies are involved and contribute their expertise in Impact Assessments and Environmental Assessments

Decisions are independent, transparent and evidence-based





# EA and Licensing



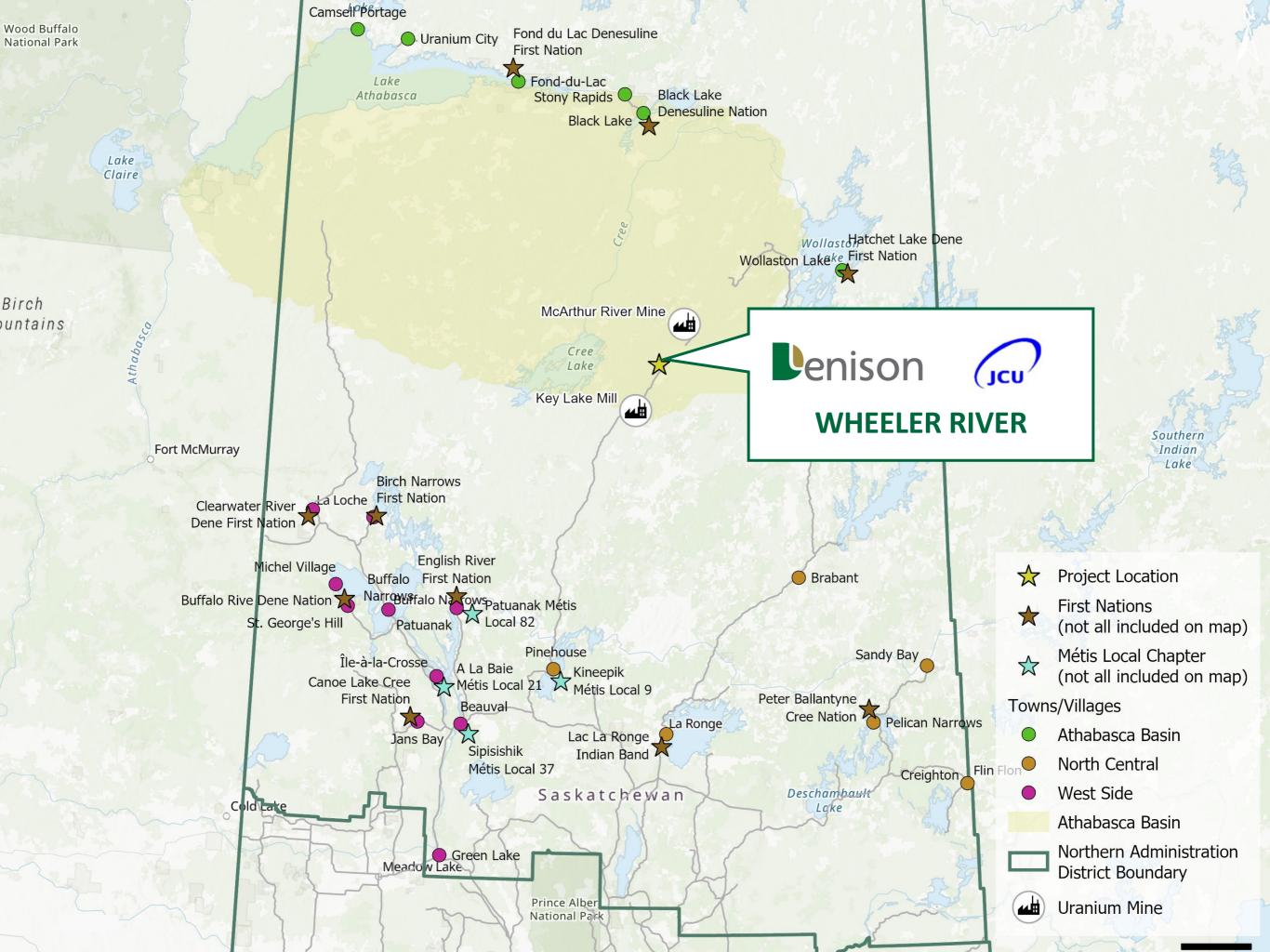
#### **Company Overview:** *Denison is focused on opportunities in northern Saskatchewan*

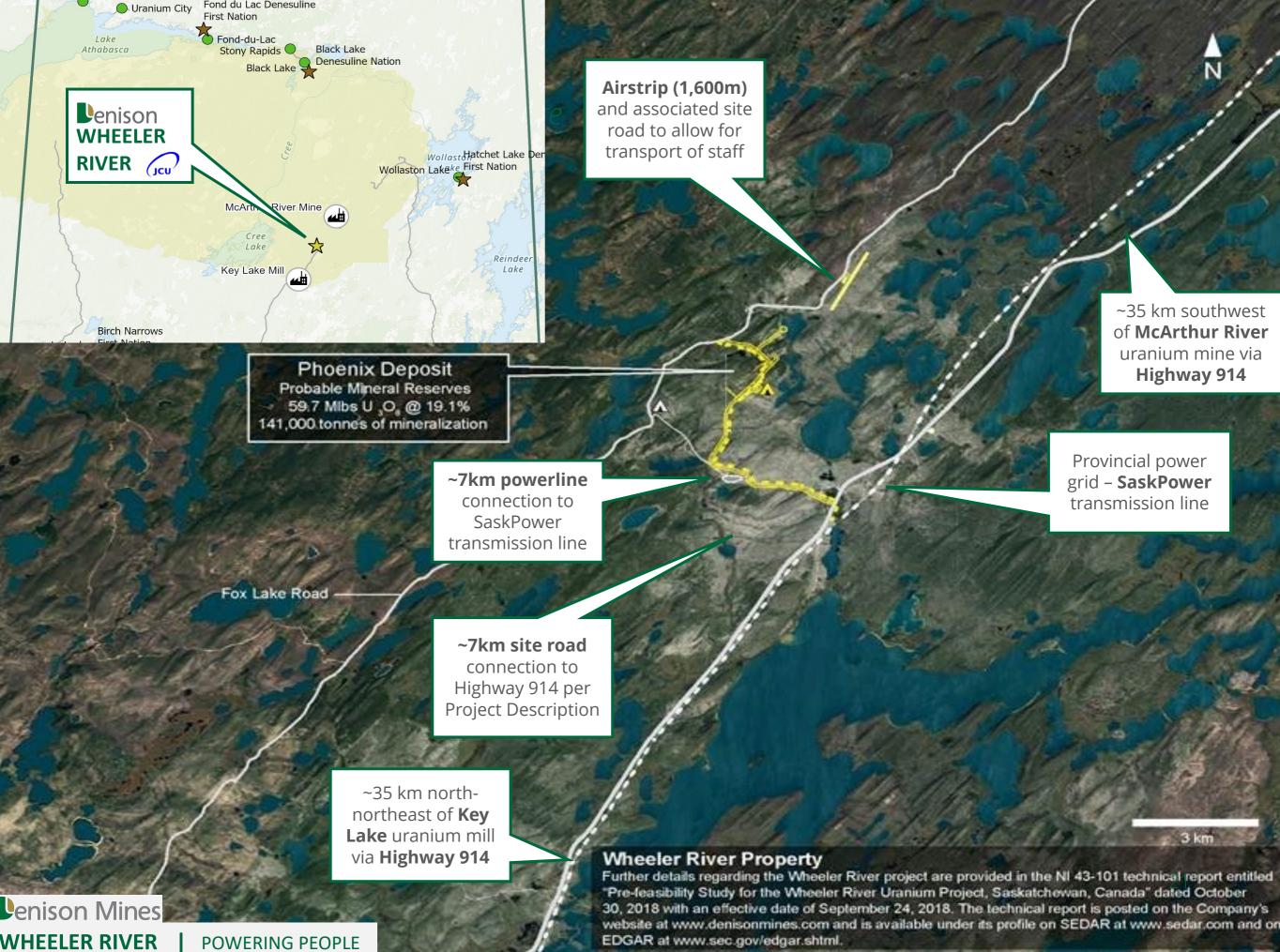
- 22.5% interest in McClean Lake Uranium Mill
- 90% interest in Flagship Wheeler River project
  - Advancing through development process
  - Largest undeveloped uranium project in the infrastructure rich eastern Athabasca Basin
  - Environmental Assessment ("EA") initiated
  - Progressive approach to mining using In Situ Recovery ("ISR") method
- 66.9% in the **Waterbury Lake Property**, hosting the Tthe Heldeth Túé (formerly J Zone) deposit
  - Recently completed Preliminary Economic Assessment ("PEA")<sup>1</sup>
  - Amenable to ISR mining method
- Several other interests in the Athabasca Basin region
  - McClean Lake, Midwest, and Waterbury Lake properties, all in close proximity to McClean mill
  - +250,000 hectares of exploration ground

#### **Denison Mines WHEELER RIVER** | POWERING PEOPLE Penison's news release dated Nov. 17, 2020: The PEA is a preliminary analysis and sh

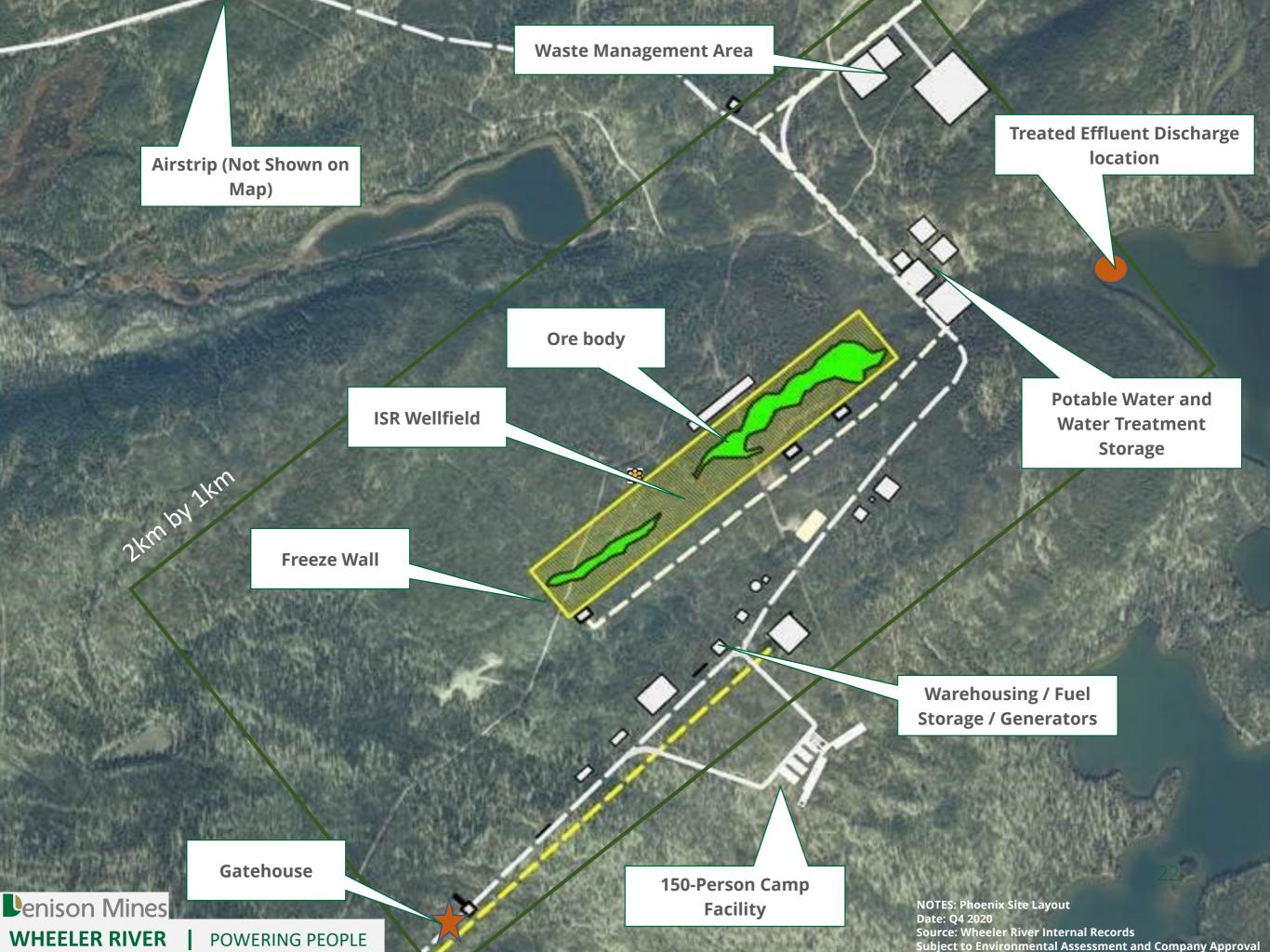
**NOTES:** (1) See Denison's news release dated Nov. 17, 2020; The PEA is a preliminary analysis and should not be considered the same as a Pre-Feasibility or Feasibility Study, see Cautionary Statements slide for details





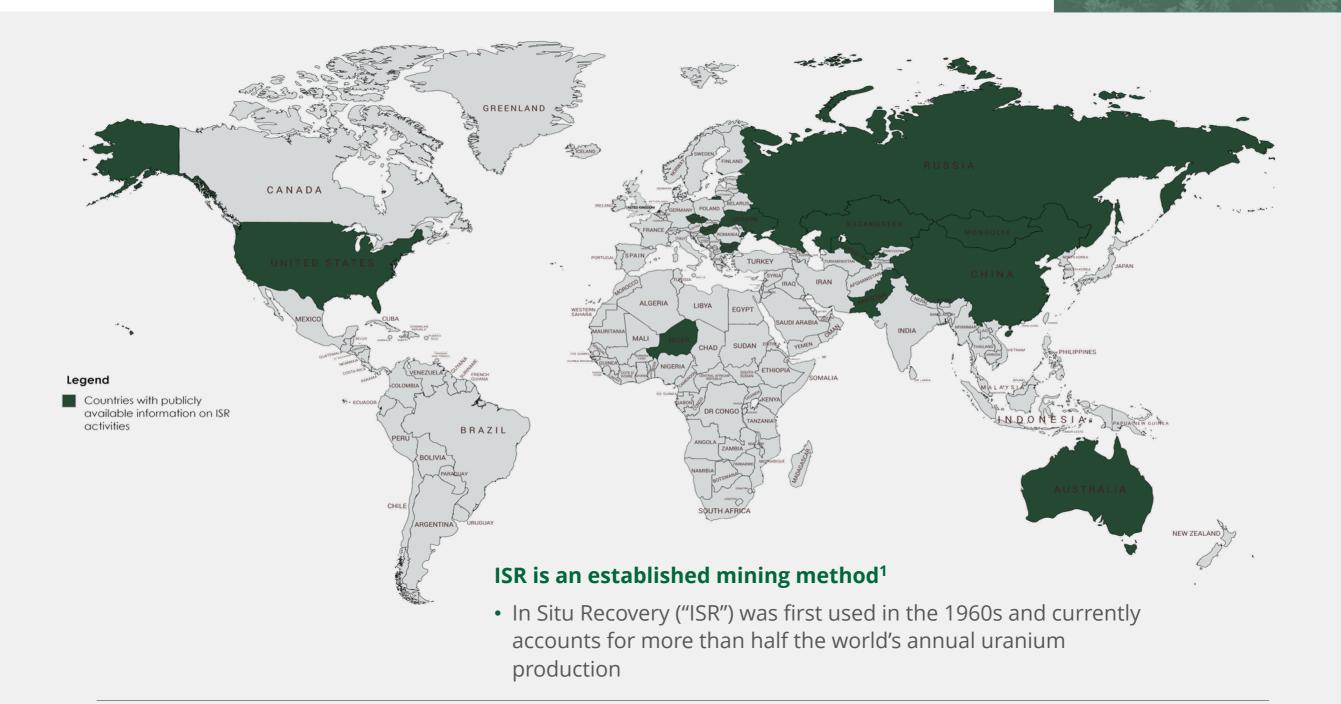


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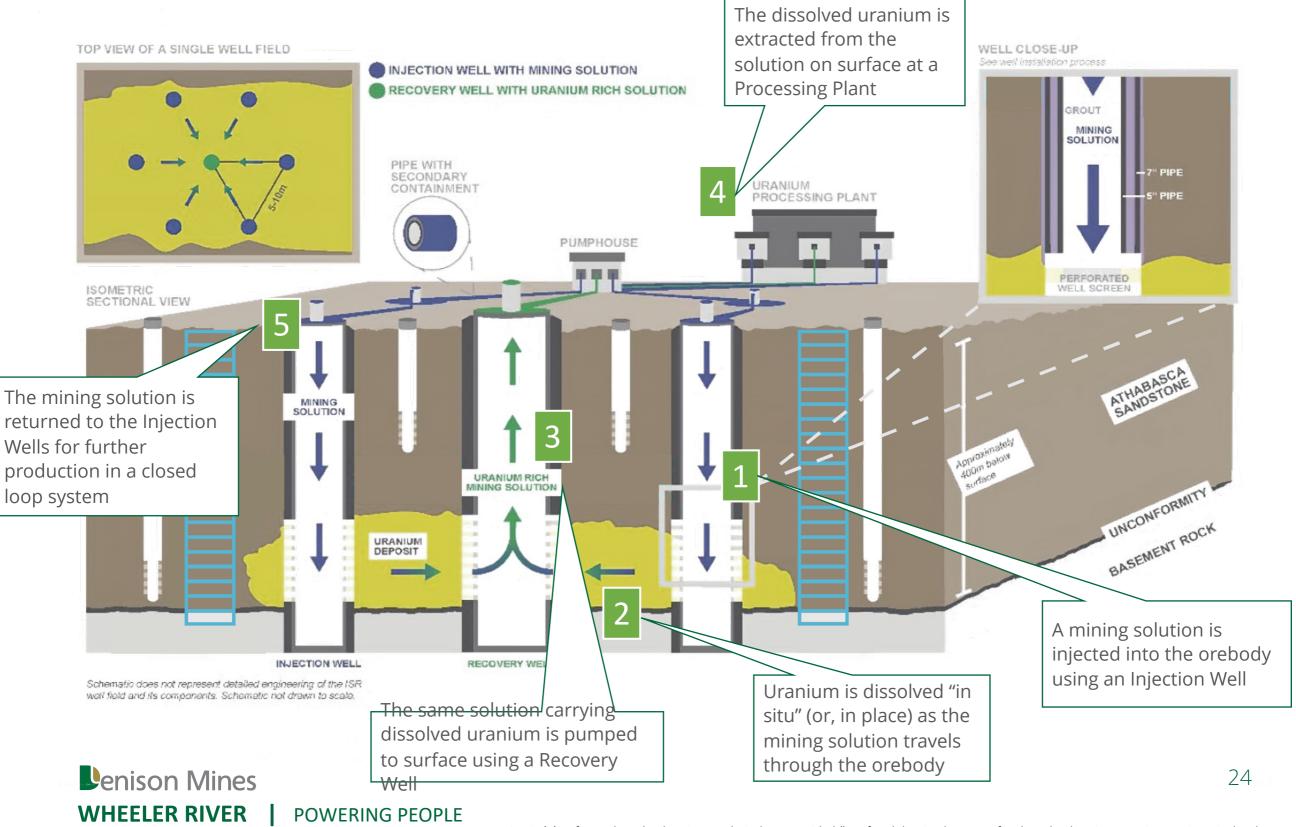


#### In Situ Recovery ("ISR") Mining: Introducing a proven mining technique to the Athabasca Basin

#### Key Components for the Project



#### In Situ Recovery ("ISR") Mining<sup>1</sup>: Introducing a proven mining technique to the Athabasca Basin



**NOTES:** (1) Refer to the Wheeler River Technical Report titled "Pre-feasibility Study Report for the Wheeler River Uranium Project, Saskatchewan, Canada" dated September 24, 2018. (2) Figure reflects Denison's decision to adopt a freeze wall approach (see press release dated December 01, 2020)

#### ISR Mining: A progressive approach to uranium mining uranium in the Athabasca Basin

#### How is ISR Different?<sup>1</sup>

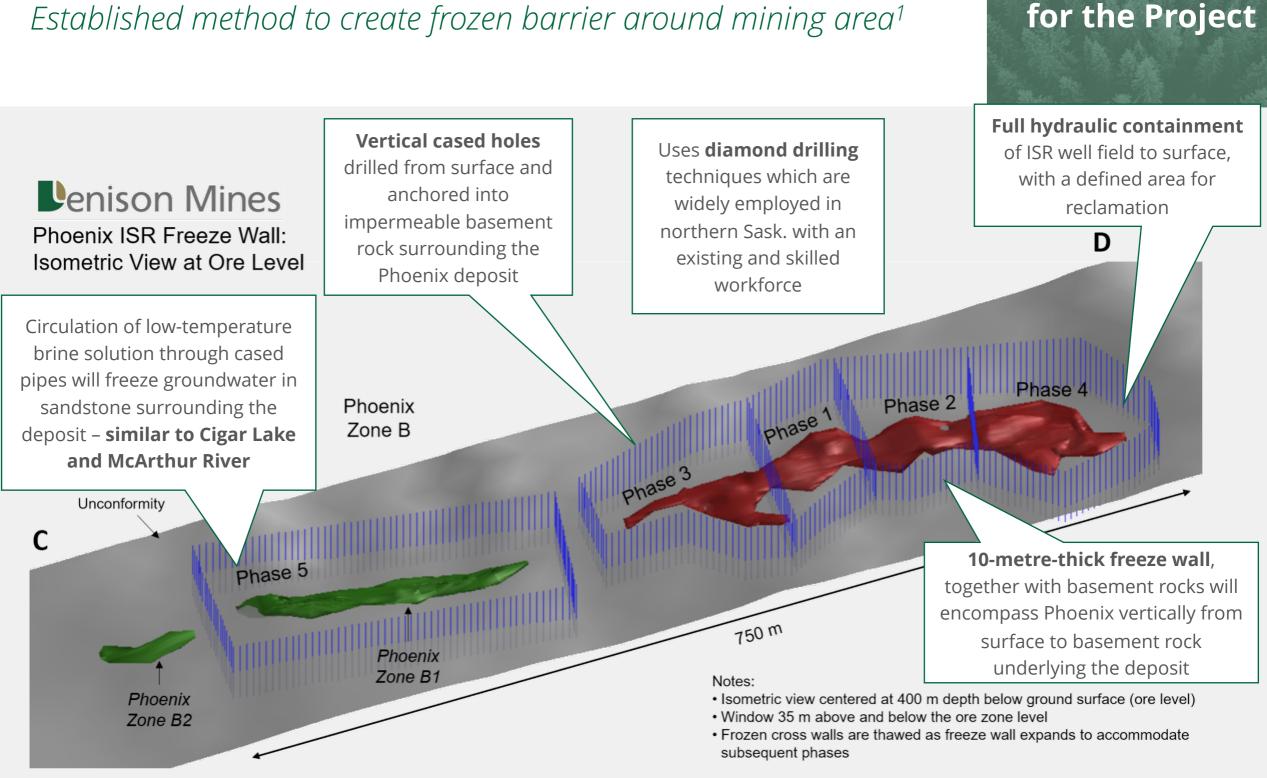
- All activities occur at surface; there are no traditional underground workings
- The ISR mining area has only wells and pipes to plant; no open pits, head-frame, or major earthworks
- There is no tailings production or longterm tailings storage, plus no large waste rock piles

#### **Waste Management Vision**

- Two main waste streams expected:
  - Gypsum (non-radioactive) remediated on site
  - Radium/Iron precipitates (radioactive)
     removed from surface
- No long term waste management expected to be <u>required</u> after mine closure

Denison Mines
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#### Freeze Containment : Established method to create frozen barrier around mining area<sup>1</sup>

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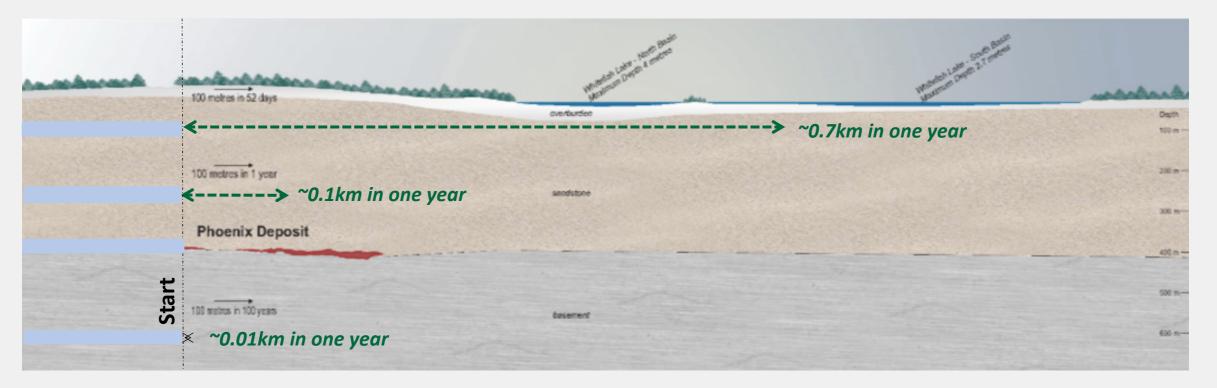
WHEELER RIVER

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**Key Components** 

#### Athabasca Basin Ground Water Modelling: Ground water at depth stays at depth<sup>1</sup>

#### Key Components for the Project



- ✓ The ore body (i.e. Phoenix) is more than 400 metres below the surface / lakes and river systems
- Groundwater in the sandstone around the ore body *is not directly* connected to surface water bodies
- ✓ Field testing in 2019 and 2020, as well as detailed hydrogeologic modelling shows that ground water stays at depth it doesn't move upward towards surface, and only moves laterally (at a very slow rate) at the depth of the ore body
- The freeze wall / fence is the ultimate contingency method to contain mining solution within mining area

#### Wheeler River / Phoenix ISR: Different mining method and a different type of operation<sup>1</sup>

#### Key Components for the Project

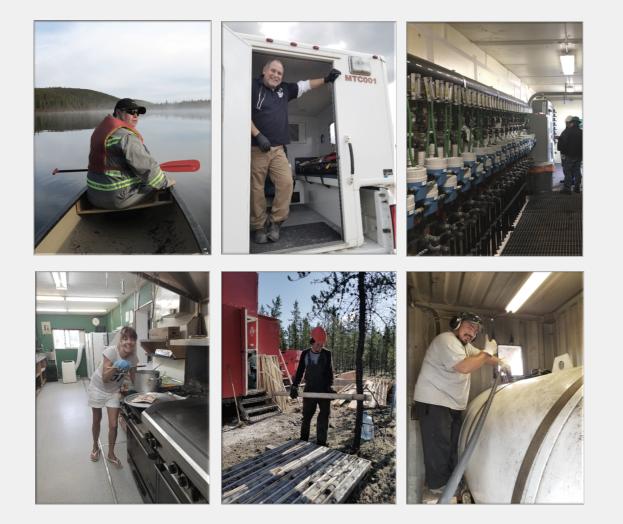


Advantages of ISR mining compared to existing uranium mining in Canada:

- ✓ Small surface footprint
- ✓ Lower water consumption
- ✓ Lower energy consumption
- ✓ Lower CO<sub>2</sub> emissions
- Small volume treated effluent released to surface water bodies
- Potential for lower radiation doses to workers
- No tailings production; storage of precipitated byproducts
- Very small volumes of clean waste rock (sandstone core from wellfield development)

### Socio-economic Considerations: Relatively small operation with opportunity to use existing skills

#### Key Components for the Project



#### Denison is committed to maximizing opportunities

- Up to 300 jobs during ~2 years of construction
- Approximately **100 jobs during operation for 10 years**
- Targeted efforts to Communities of Interest, with a broad focus on northern Saskatchewan and Indigenous communities
- Similar job types to those at existing uranium operations
  - Trades, surface, environment, radiation, safety, camp, security
  - ISR operators are similar to process operators (training can be done in Meadow Lake)
- Specific ISR training will be provided
- Pre-requisite training will include **diploma or technical certification available in Saskatchewan**. Examples:
  - Process Operation Technician (SIIT in Meadow Lake)
  - Chemical Technology (Sask. Polytechnic)
- Construction and operation activities targeted to Northern
   Saskatchewan / Indigenous-owned businesses

### 15 Minute Break



## Door Prizes **Beauval**

- ✓ 3 x \$100 Gift Certificate to the Beauval General Store
- ✓ 3 x \$100 Gift Certificate to Mdeez Confectionary

#### Prizes at end of Presentation:

- 2 x \$100 Gift Certificate to Beauval General Store
- 2 x \$100 Gift Certificate to Mdeez Confectionary
- ✓ 2 x \$250 Gift Certificate to Beauval General Store
  - ✓ Door Prizes **Ile Crosse**
  - ✓ 6 x \$50 Gift Certificate to Yewr-Way
  - ✓ 6 x \$50 Gift Certificate to Northern Sunset Motel

#### Prizes at end of Presentation

- ✓ 4 x \$50 Gift Certificate to Yewr-Way
- ✓ 1 x \$250 Gift Certificate to Yewr-Way
- ✓ 4 x \$50 Gift Certificate to Northern Sunset Motel
- ✓ 1 x \$250 Gift Certificate to Northern



#### Door Prizes Pinehouse

- ✓ 3 x \$100 Gift Certificate to Northern Shores
- ✓ 1 Handmade wooden cutting board by Lakeshore Custom Builders
- ✓ 1 Handmade wooden ladder by Lakeshore Custom Builders
- ✓ 3 x \$100 Gift Certificate to Co-Op Gas Bar

#### Prizes at end of Presentation

- ✓ 2 x \$100 Gift Certificate to Northern Shores
- ✓ 1 Handmade wooden ladder by Lakeshore Custom Builders
- ✓ 2 x \$100 Gift Certificate to the Co-Op Gas Bar
- ✓ 2 x \$250 Gift Certificate to the Co-Op Gas Bar

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## Step 1 – Click link or scan QR code

## CLICK HERE TO START SURVEY!

The survey link will be posted in the chat function of the Zoom meeting, as well as posted on your community Facebook page after the meeting



## Step 2 – Complete the survey by February 18, 2021

## Step 3 – Cross your fingers... for a chance to win 1 of 10 VISA Gift Cards (\$100)



- Open the camera on your phone or a QR scanning app
- 2. Hold it over the QR code
- A link to the online survey online will pop up on your phone
- 4. Click on the link
- 5. Complete the survey

Survey closes on February 18, 2021



#### https://www.surveymonkey.com/r/WheelerRiverCommunityEngagementFeb2020

|        | Wheeler River Project Community Engagement  |
|--------|---|
|        | Wheeler River Project Survey  |
|        | The purpose of this survey questionnaire is to inform Denison Mines which components of the environment community members value most, and to identify interests or concerns related to the proposed Wheeler River Project.  |
|        | Valued components (VCs) refer to environmental biophysical or human features that may be impacted<br>by a project. The value of a component not only relates to its role in the ecosystem, but also to the<br>value people place on it. For example, it may have scientific, social, cultural, economic, historical,<br>archaeological or aesthetic importance. |
|        | Reference: 2016 Generic Guidelines for the Preparation of an Environmental Impact Statementpursuant to the Canadian Environmental Assessment Act, 2012<br>This survey is conducted by Denison Mines with support from Canada North Environmental Services.  |
|        |   |
| 1. Age |   |
|        |   |

0-15

0 16-34

35-64



#### https://www.surveymonkey.com/r/WheelerRiverCommunityEngagementFeb2020

7. From the list below, please click on the valued components that you feel are most important for us to study as part of the impact assessment.

| Local economy                               | Community well-being        | Surface water                   |  |
|---|-----------------------------|---------------------------------|--|
| Employment                                  | Public safety               | Sediment                        |  |
| Business activity                           | Infrastructure and services | Invertebrates                   |  |
| Training                                    | Terrain                     | Fish                            |  |
| Industry use                                | Soil                        | Fish habitat and aquatic plants |  |
| Outfitting tourism                          | Vegetation                  | Groundwater quality             |  |
| Traditional land and resource use           | Ungulates                   | Air quality                     |  |
|   | Birds                       | Noise level                     |  |
| Cultural expression                         | Furbearers                  |                                 |  |
| Heritage resources                          |                             |                                 |  |
| Why did you choose these valued components? |                             |                                 |  |
|   |                             |                                 |  |
|   |                             |                                 |  |

#### **Environmental Assessment:**

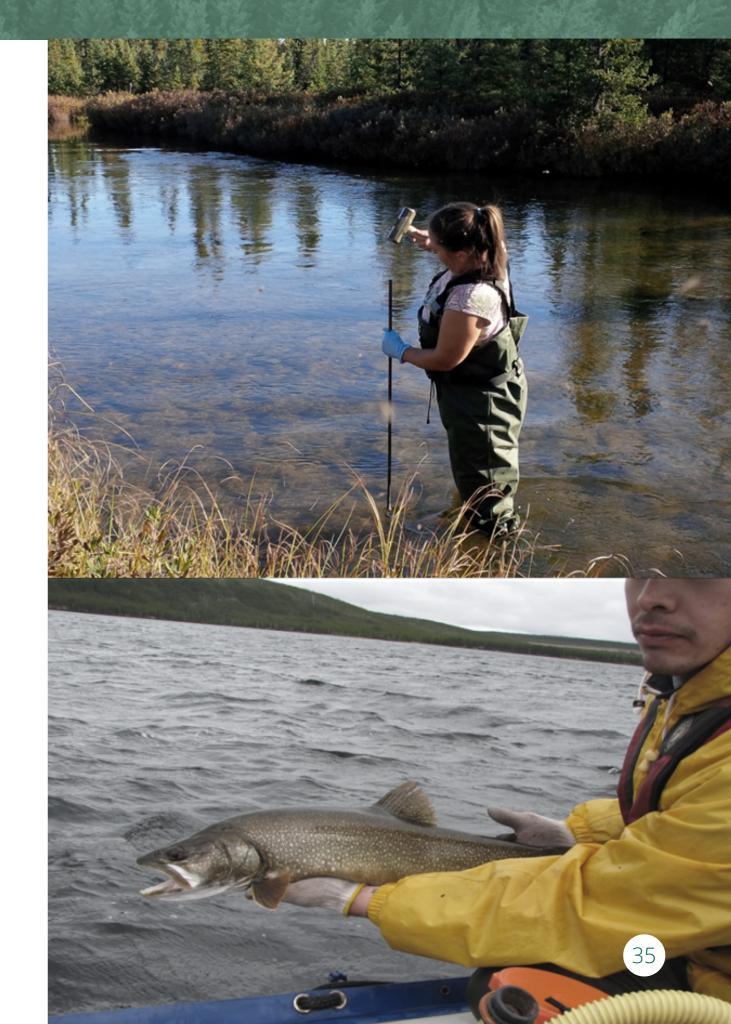
Understanding the Project's interactions with human and biophysical environment

#### **Baseline Studies**

- Environmental baseline studies have been ongoing since 2012
  - Denison needs to understand the current environmental conditions within and around the Wheeler River Project area

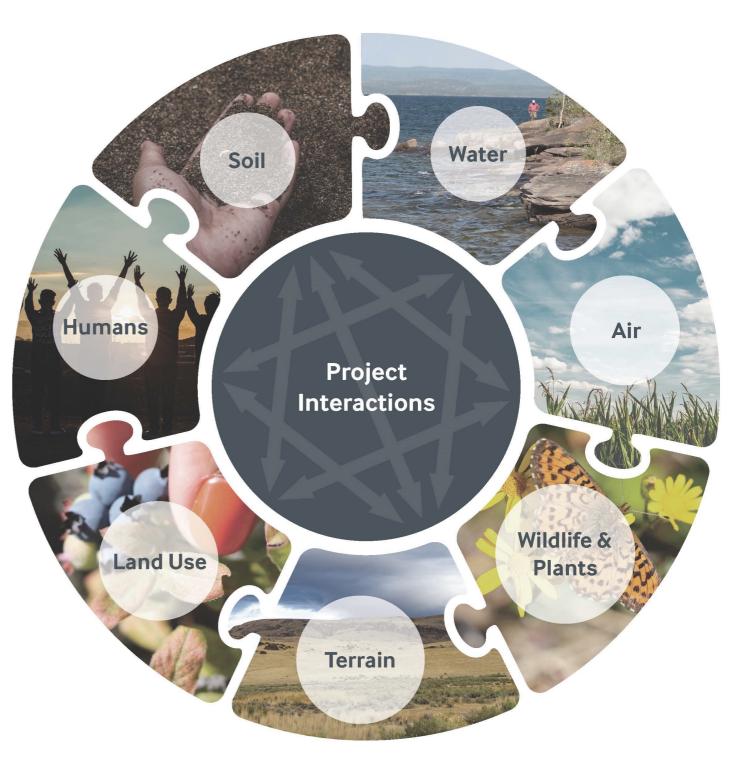
#### **Environmental Assessment**

- Initiated the federal and provincial environmental assessment processes in May 2019 with the Wheeler River Project Description
  - Lead federal regulator: Canadian Nuclear Safety Commission
  - Lead provincial regulator: Saskatchewan Ministry of Environment, Environmental Assessment Branch
- Technical studies designed to understand potential effects of the Project on the biophysical and human environments



Valued Components: Understanding effects on the things that are important

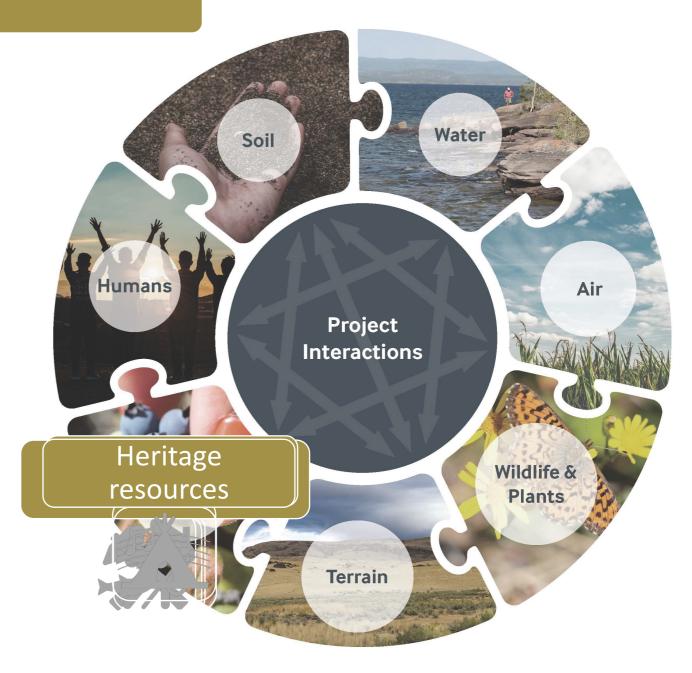
- Gain an understanding of what is important to the people who use the area and to the people who may be affected by project activities.
- Gather information through research, from regulator feedback and through engagement with communities and Indigenous groups communities
- **Design the environmental** studies to predict how the VC's may change and what measures can be put in place to minimize and monitor the changes
- Monitoring and reporting of the changes to VC's will carry on throughout all phases of the project into decommissioning and post closure

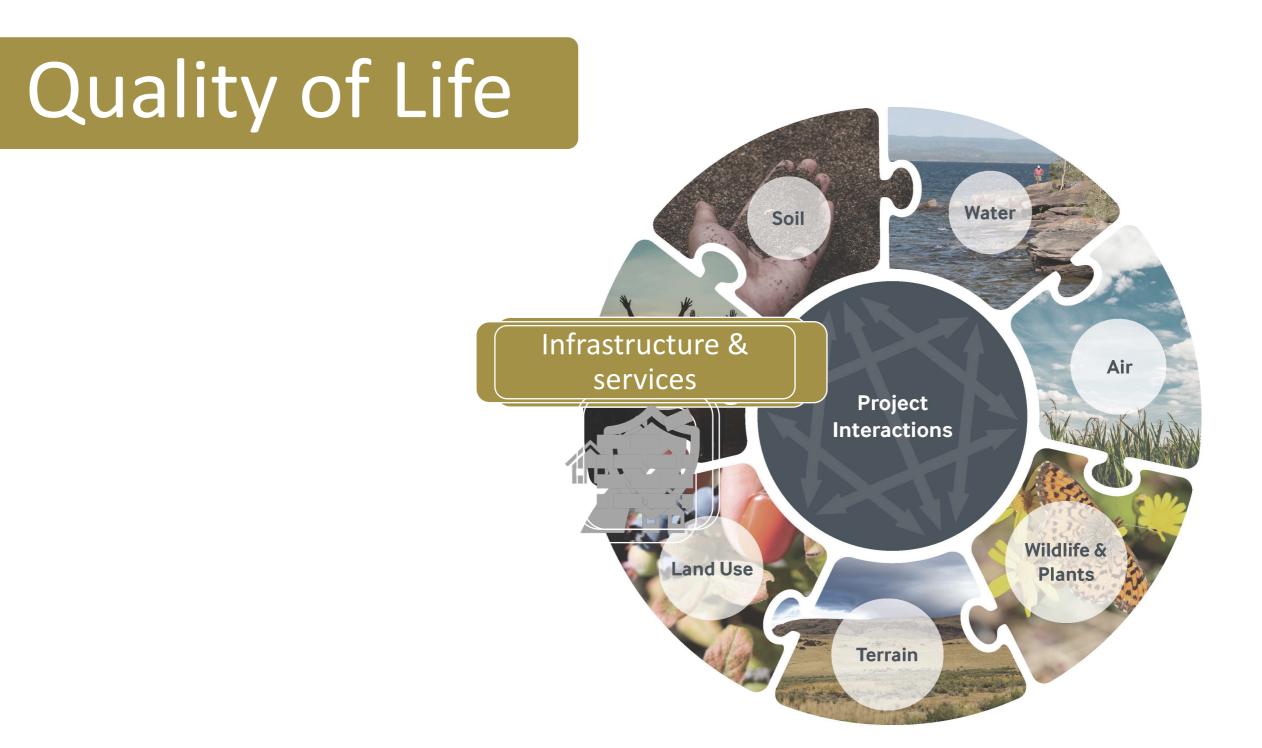


# Economy



### Land and Resource Use, Cultural Continuity

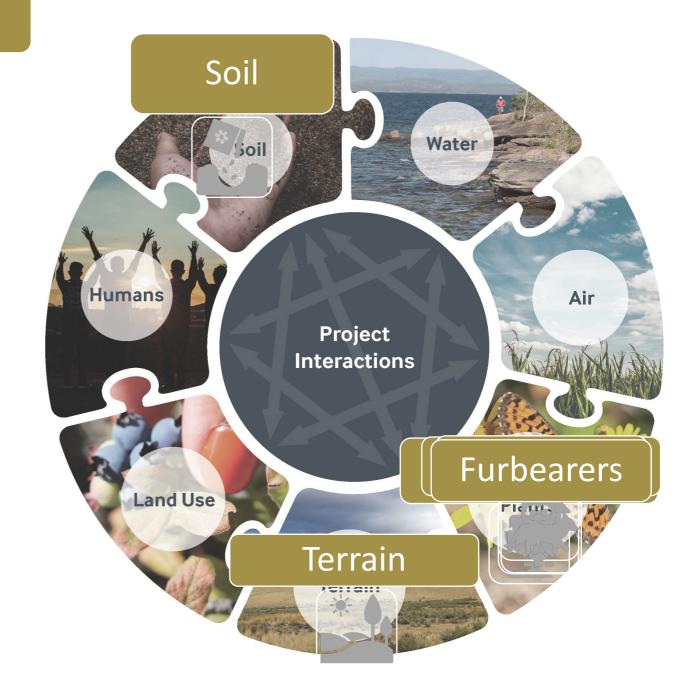




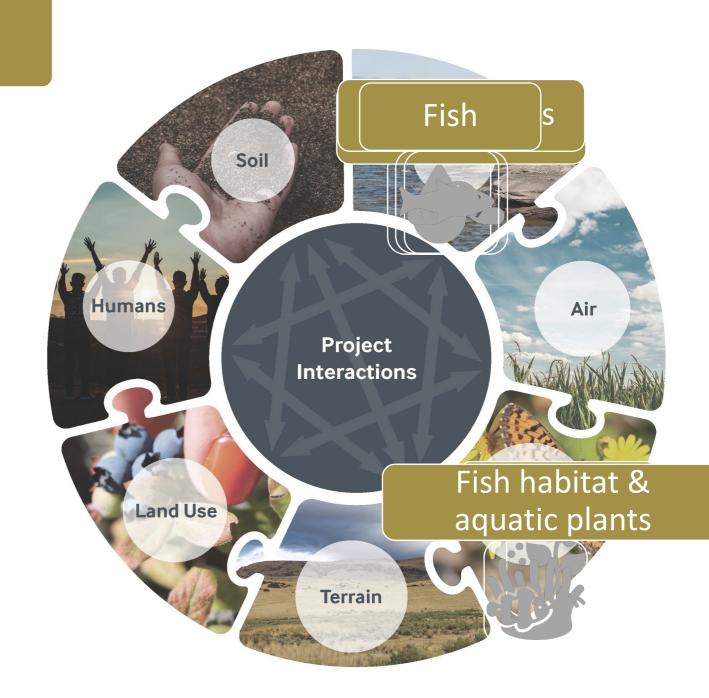
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## Terrestrial



## Aquatic



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# Groundwater



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# Atmosphere & Acoustic



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### **Questions / Comments** *Summary of questions*



### Next Steps: *Keeping conversation going and community informed*





#### **Conversation Channels**

- Denison will be continually improving communication channels
- Denison will use information shared with us to inform environmental assessment
- Denison will share information back with the community and leadership regarding what we heard from these sessions
- Contact us at <u>WheelerRiverInfo@denisonmi</u> <u>nes.com</u>

#### **Conclusion:** *Thank you for attending!*



Prizes at end of Presentation Beauval:

- ✓ 2 x \$100 Gift Certificate to Beauval General Store
- ✓ 2 x \$100 Gift Certificate to Mdeez Confectionary
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