

Wheeler River Project

Canadian Nuclear Safety Commission
Construction Licence Hearing – Day 1

October 8, 2025

Powering
**PEOPLE, PARTNERSHIPS
AND PASSION.**

 **Enison Mines**

Uranium Development & Exploration

The Athabasca Basin, Northern Saskatchewan



70 The Company and Its People
Bringing 70 years of history into the future

Genison Mining

345

Wheeler River Project Overview

**Proposed In-Situ Recovery (ISR)
Uranium Mine in Saskatchewan**

The Denison Mines logo, featuring a stylized green and yellow 'D' followed by the words 'enison Mines' in a white sans-serif font.

Denison Mines

A background image of an oil rig at night, with a green semi-transparent overlay. The rig is illuminated by its own lights, and the sky is dark blue.

Agenda

1

Project Overview and History

2

Indigenous and Community Engagement

3

Environmental Assessment

4

Licence to Prepare and Construct

5


Other Matters

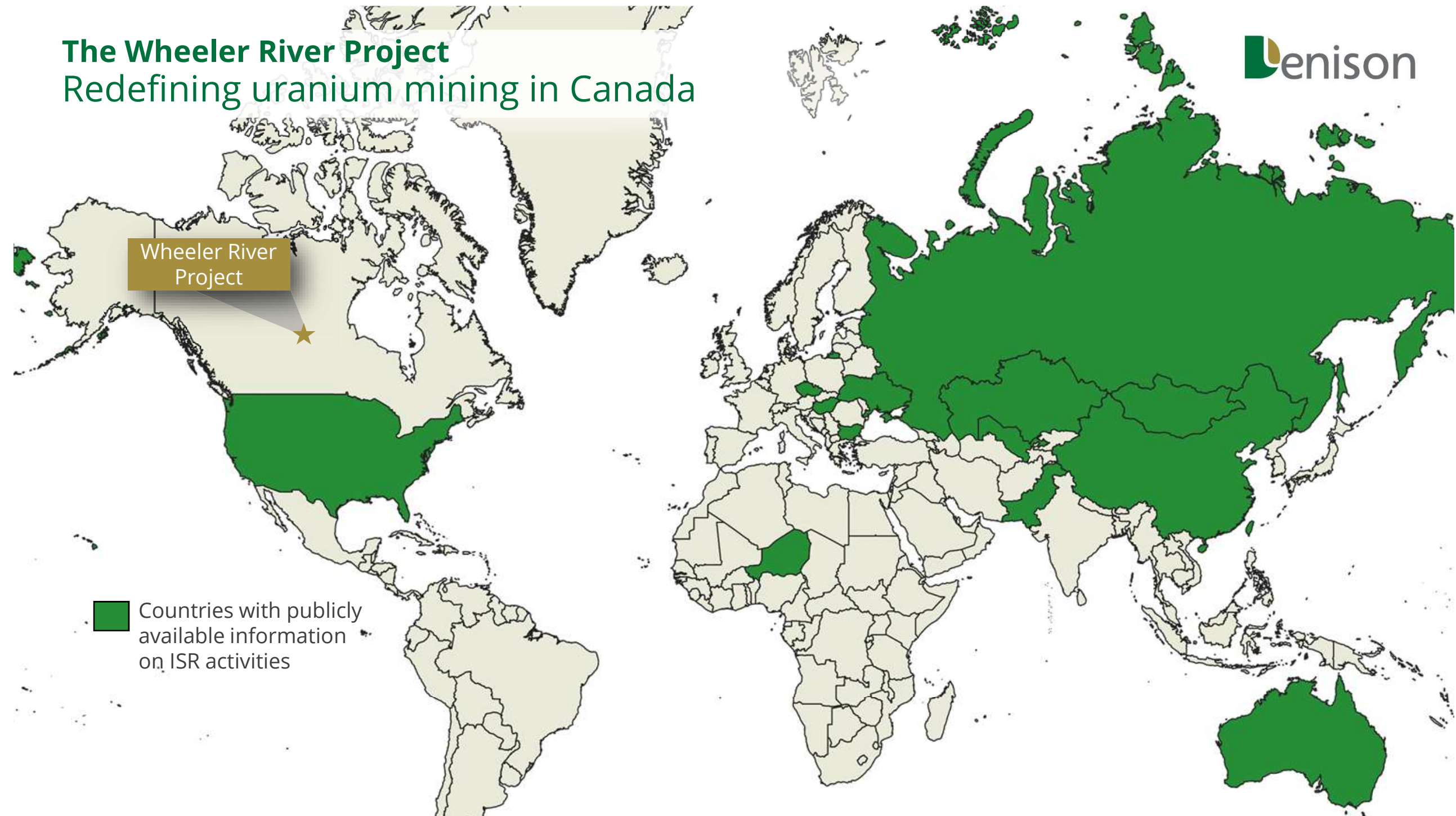
The Wheeler River Project

Redefining uranium mining in Canada



Wheeler River
Project

 Countries with publicly
available information
on ISR activities



Request of the Commission

Denison is seeking

- ✓ A positive Commission decision on the Environmental Assessment for the Wheeler River Project under the Canadian Environmental Assessment Act (2012); and
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to undertake the activities that the licence will authorize and will, in carrying on these activities, make adequate provision for the protection of:

- ✓ the environment,
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An aerial photograph of a construction site. In the upper left, there are four large, cylindrical storage tanks. A dirt road winds through the center of the site. To the right of the road, there are several white trailers and trucks parked. In the lower right, a large, white, arched structure, possibly a tunnel or a large storage shed, is visible. The site is surrounded by dense forest. The overall tone of the image is sepia or aged.

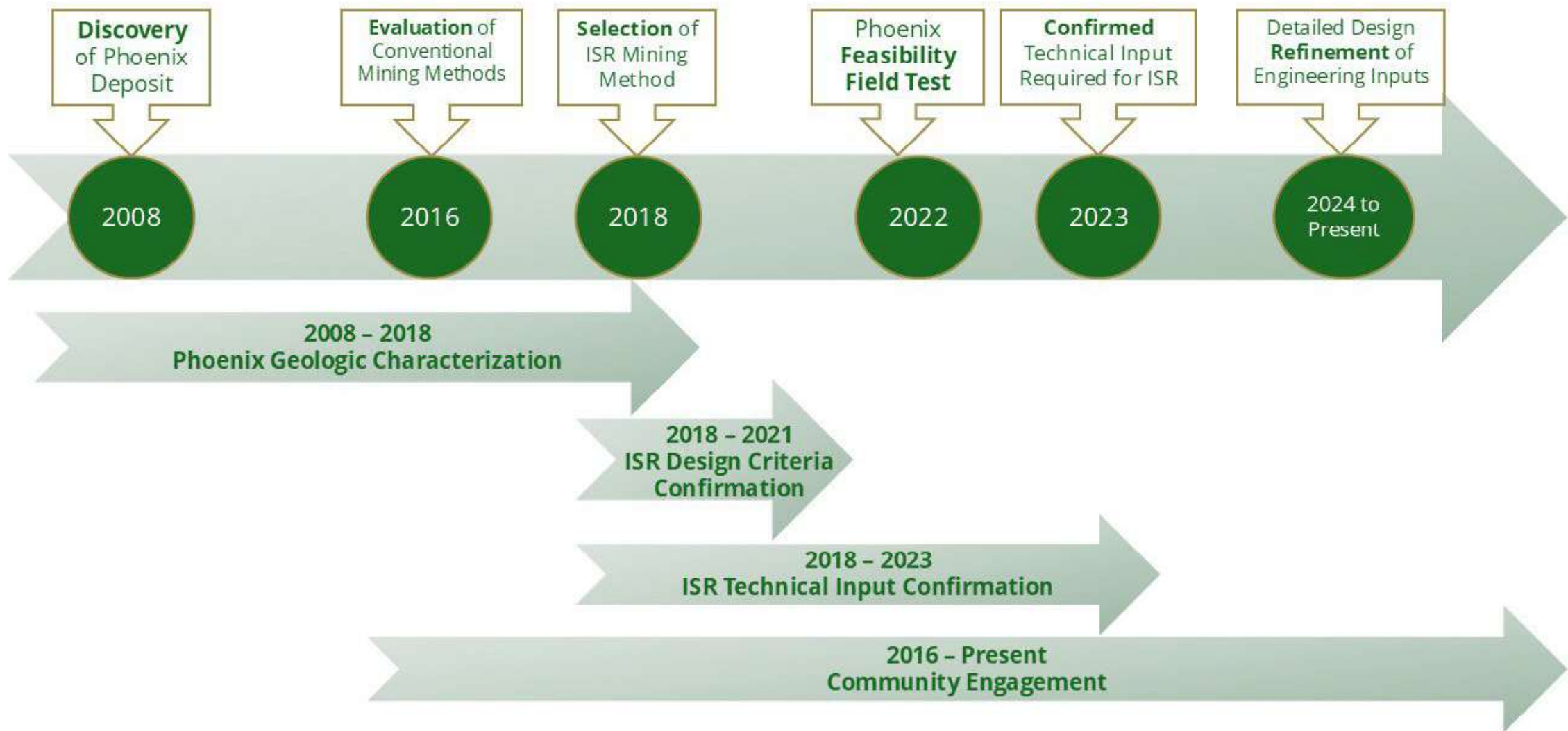
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Project Overview & History

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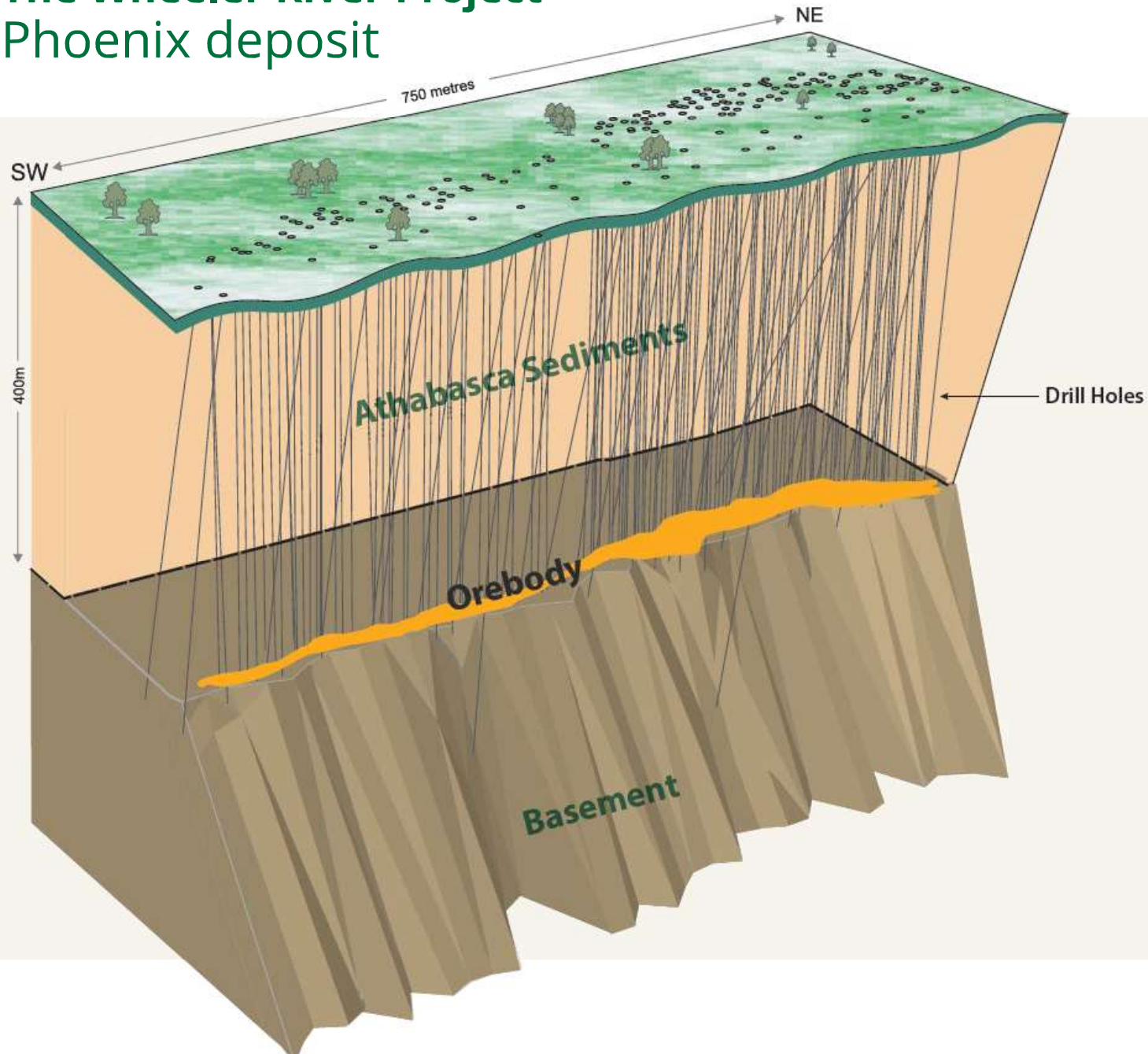
The Wheeler River Project

Discovery to development



The Wheeler River Project

Phoenix deposit



Discovered in 2008

High grade
deposit

Located at
400m depth

Comprehensive and deep
understanding of geologic controls

In-Situ Recovery Mining

General criteria for successful ISR mining



Deposit Characterization

Permeability

Connection between **injection** and **recovery** wells

Containment

Control of mining solutions

Leachability

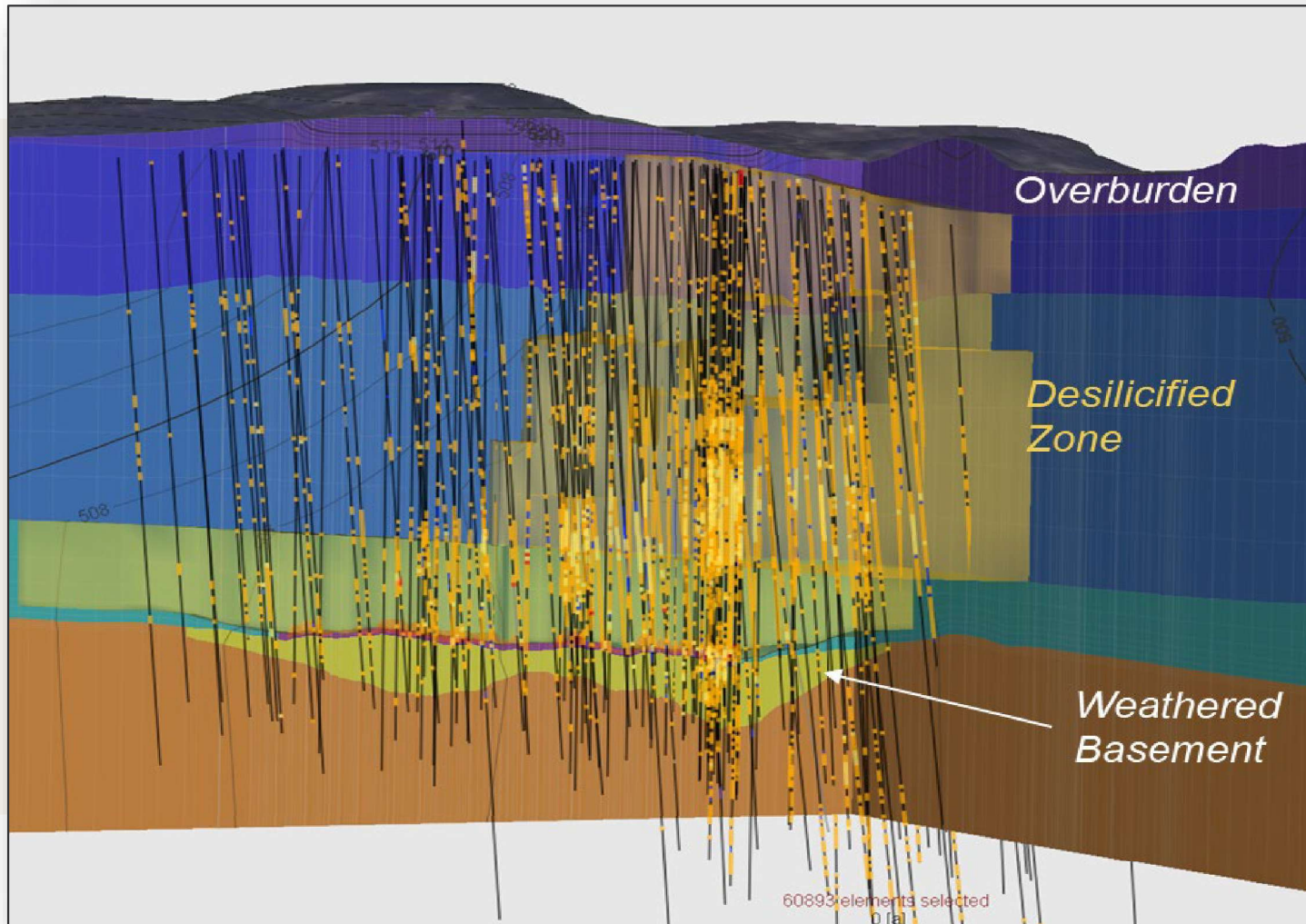
Ability to **dissolve** uranium from the ore

Processing

Transformation into **product** for next stage of nuclear fuel processing

The Wheeler River Project

Extensive geological characterization of the deposit



2008 to 2018

Closely

spaced drill
holes

ISR-specific

geological, field and
lab data collected

Achieved **high confidence**
standards from third party resource
and reserve estimation

Building Confidence in the Wheeler River Project: Confirmation of ISR mining criteria specific to deposit



Permeability
verification

The image shows a yellow cylindrical container with a grey valve assembly and two pressure gauges. A black cable is coiled on a reel in the foreground, and a pair of pliers lies on the yellow surface.



Leachability
verification

The image shows a laboratory setup with a blue machine housing several glass vials. A computer monitor and various cables are visible in the background.



Containment
verification

The image shows a blue mechanical device with a central vertical rod and multiple colored wires (red, yellow, green, blue) connected to it. The device is mounted on a base with several bolts.



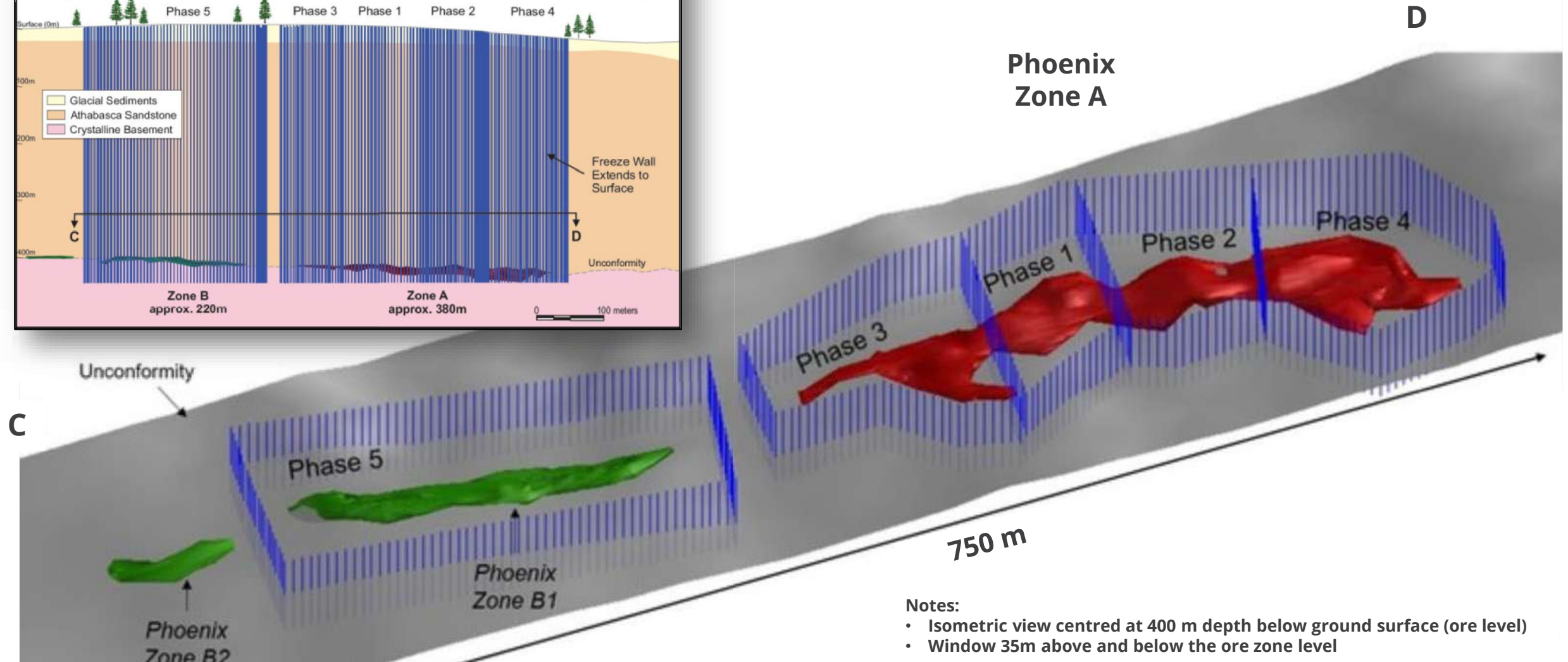
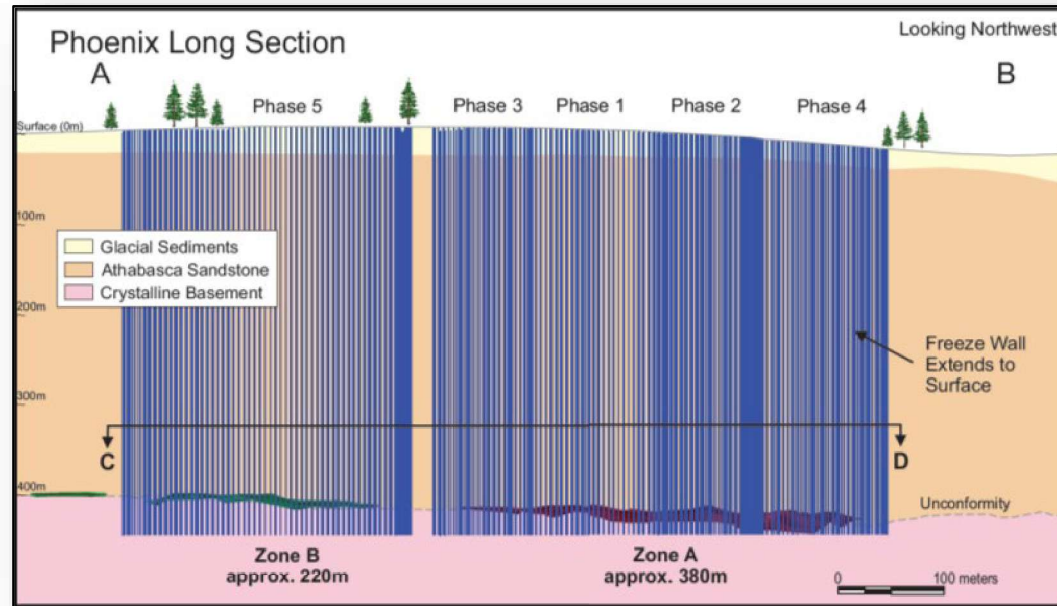
Processing
Verification

The image shows a blue machine with a brown cylindrical component wrapped in a mesh. A silver foil-wrapped object is visible, along with various wires and a metal container.

2022 / 2023 Fully Permitted In-Situ Recovery Feasibility Field Test (FFT): Successful field validation of ISR mining method criteria



Wheeler River Project Design Feature: Inclusion of well-established freezing technology



Notes:

- Isometric view centred at 400 m depth below ground surface (ore level)
- Window 35m above and below the ore zone level

2

Indigenous & Community Engagement

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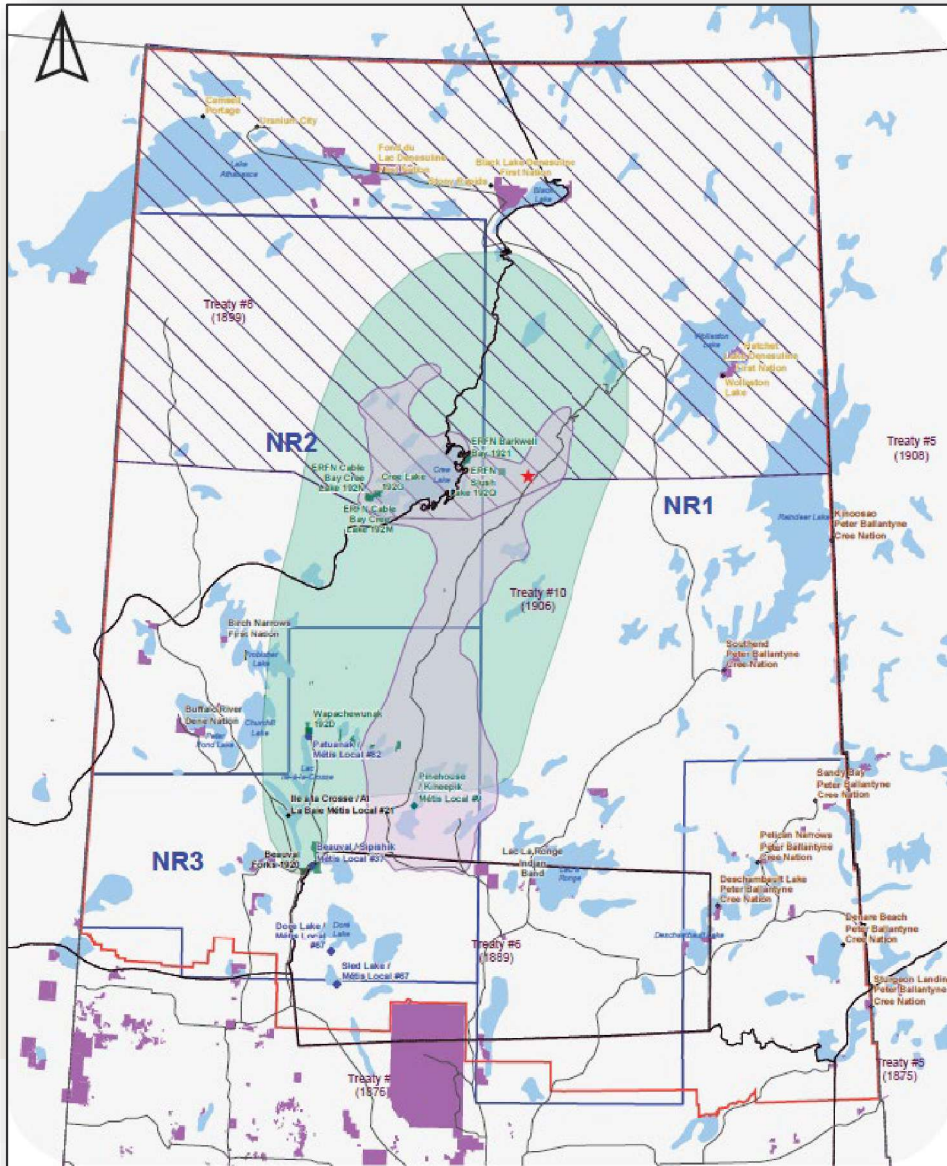


Indigenous & Community Engagement Rooted in history & values



Indigenous Engagement

Program implementation spanning almost 10 years



Basis

developed from Denison's **decades-long** presence as operator of the Wheeler River Property.

Guided

by the direction of CNSC and Federal Government, plus **experience** with other operations in the area.

Complemented

with **progressive** actions related to Indigenous rights in Canada.

Adapted

as **new information** is obtained.

Ongoing into the future

Indigenous Engagement

2016 to present – engagement highlights over the years



2024: Uranium City community meeting



2022: ERFN Patuanak community meeting



2023: Wheeler River Project ceremony



2023: Site Tour with ERFN



2019: Site Tour with various leaders

Engagement on
Project design options/modification consideration

Indigenous nation authored sources of Indigenous knowledge included in the EA

Engagement information and data
woven throughout the entire EIS

Support and consent provided by 2 Indigenous nations and 5 communities

Community Engagement Program

Founded in partnerships and long-term legacy creation



2020: ERFN Culture camp



2024: Back to Batoche



2024: Pinehouse National Day for Truth & Reconciliation



2023: Pinehouse polar bear plunge



2024: ERFN Patuanak Christmas celebration

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The Environmental Assessment

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The Environmental Assessment

Regional landscape of the Wheeler River Project



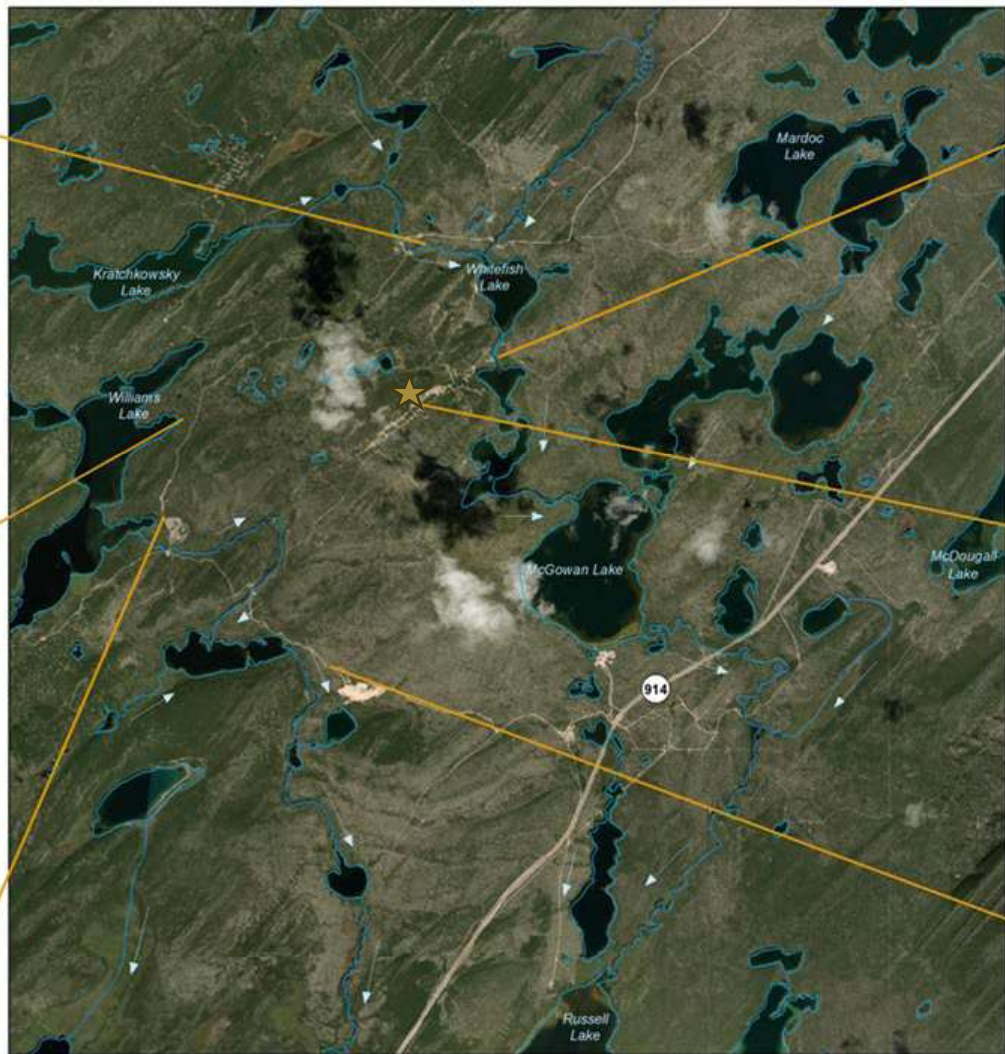
Unimpacted
watercourse,
upstream of
proposed
Project



Unimpacted
lake, upstream
of proposed
Project



Existing Denison
exploration
camp



Proposed water
release location
into Whitefish
lake



Wheeler River
Project location

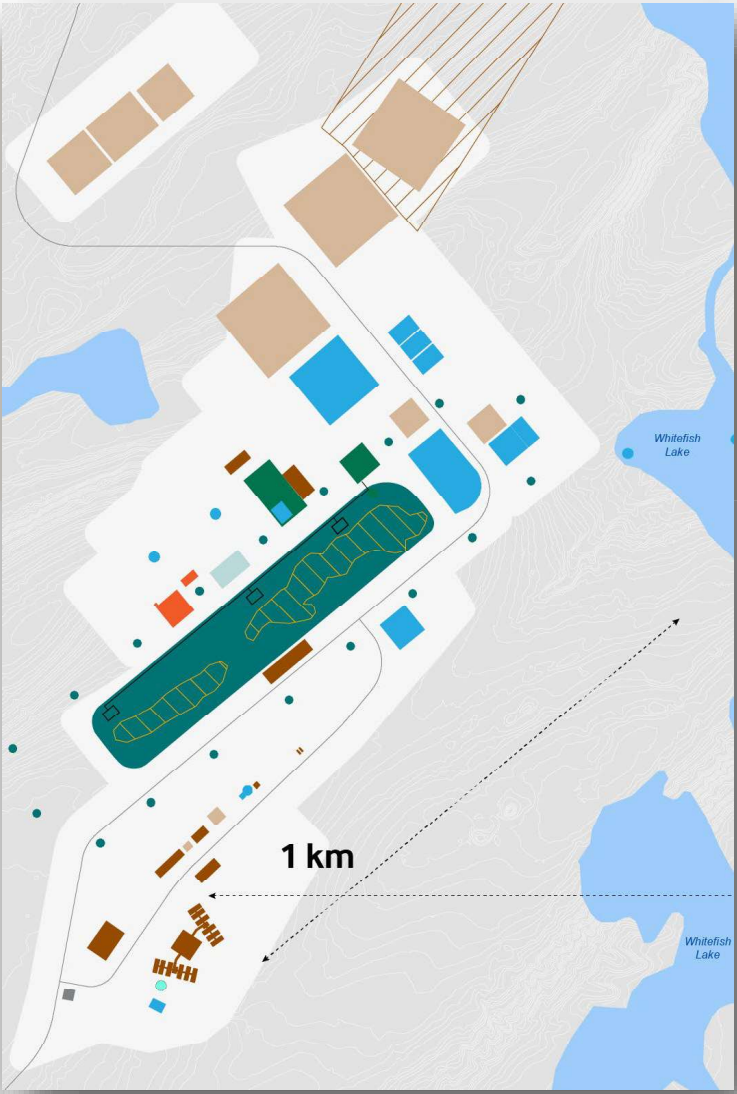
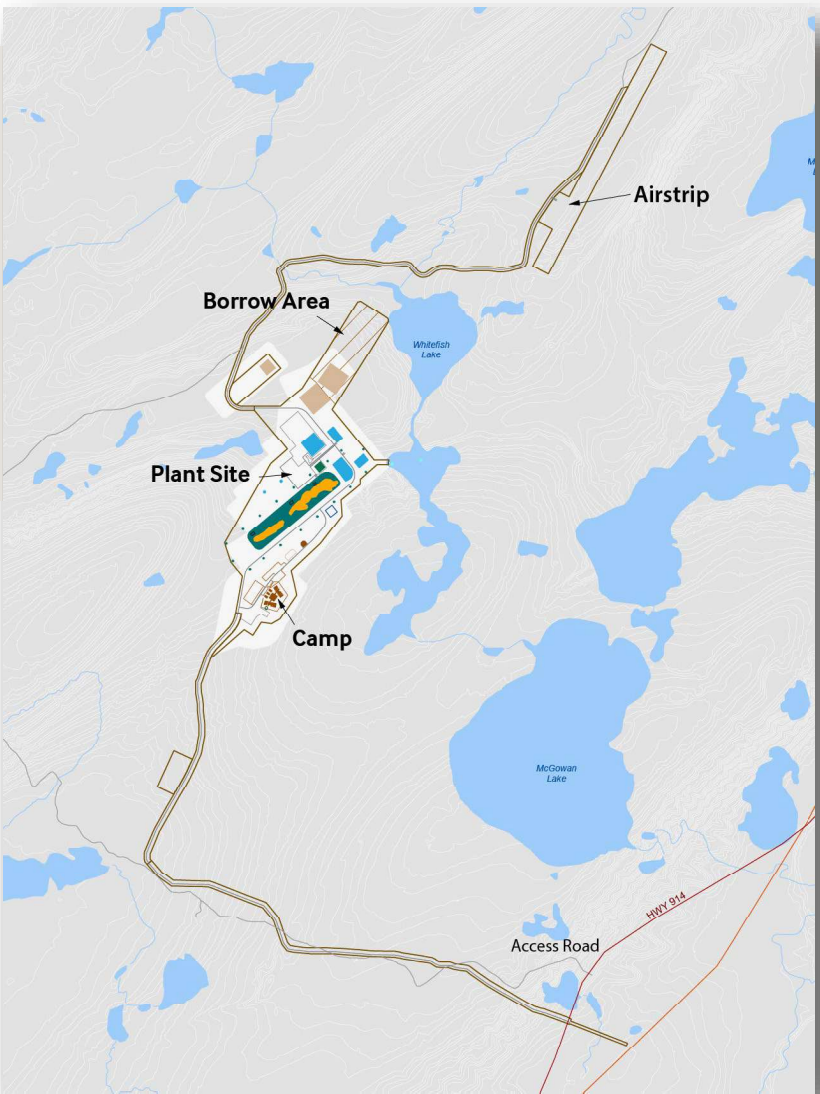


Existing
temporary
access road to
Project



The Environmental Assessment

Project site overview



Compact project footprint

Use of **existing** SaskPower infrastructure

Use of **existing** Highway 914 with additional **short** access road to project location

- Mining
- Processing
- Water Management
- Waste Management
- Access and Transportation
- Power and Heating
- Support Facilities

The Environmental Assessment

Fulsome assessment of changes to biophysical & human environments

The Wheeler River Project can be constructed, operated and decommissioned while remaining protective of the human and biophysical environment.



The Environmental Assessment Comprehensive EIS review process



Draft EIS submitted November 2022

Over 400
regulatory comments
received across several
Provincial & Federal
departments

Over 580
public comments received
from Indigenous nations &
communities

Responses
provided by Denison to all
400+ regulatory comments

Responses
provided by Denison to all
public comments from
Indigenous nations &
communities

Final EIS accepted December 2024

The Environmental Assessment Focused on Protecting Groundwater



No Interaction

between the surrounding groundwater and the mining zone solutions inside the freeze wall during operations

Remediation Criteria

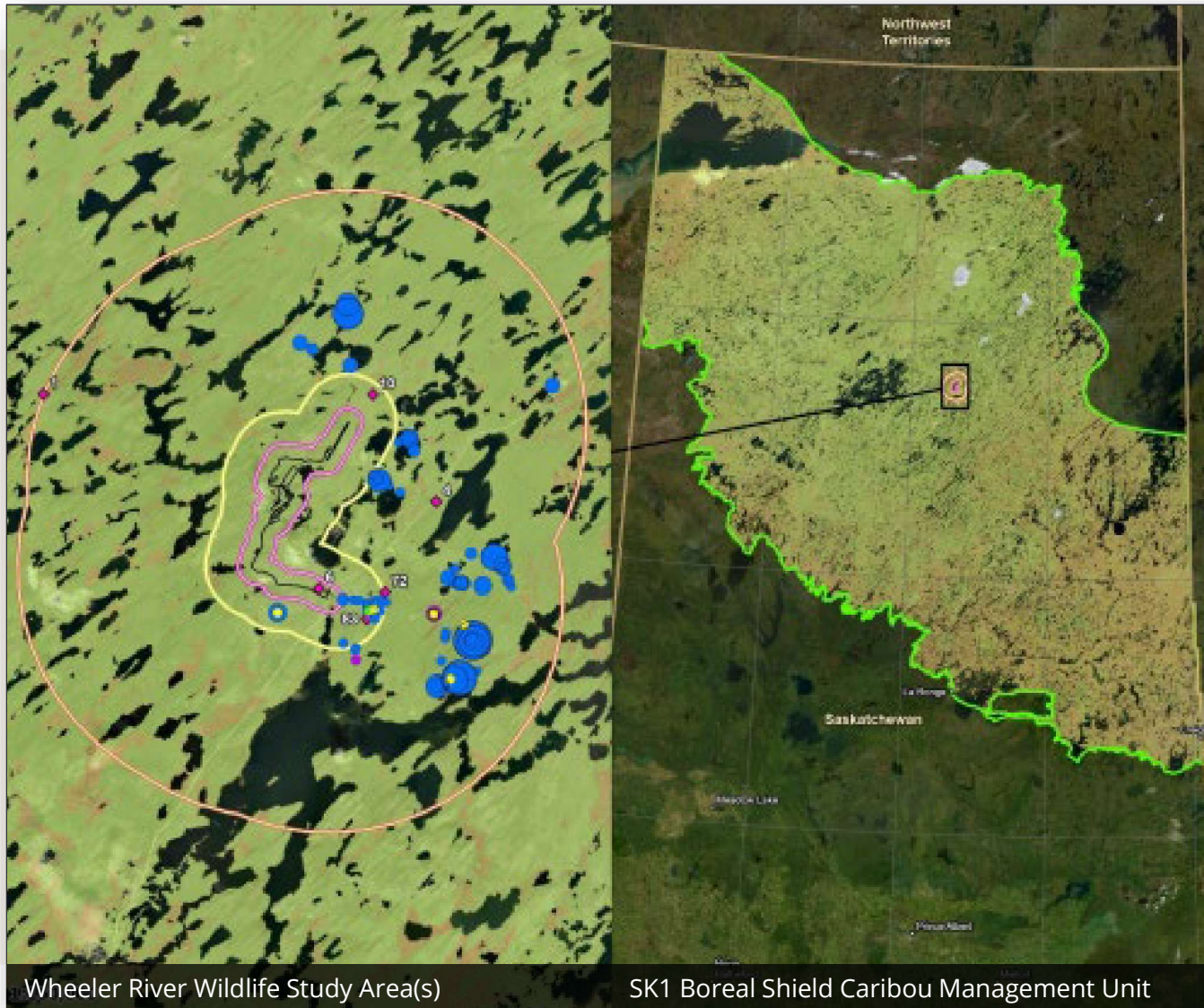
was defined as being technically achievable through testing

Future Centuries Model

confirmed the remediation criteria to be effective in protecting the natural receiving environment

The Environmental Assessment

An emphasis on habitat for sensitive species



Wheeler River Wildlife Study Area(s)

SK1 Boreal Shield Caribou Management Unit

Small Footprint

Project footprint is relatively small at **170ha**

Species at Risk

No significant adverse effects

Mitigation

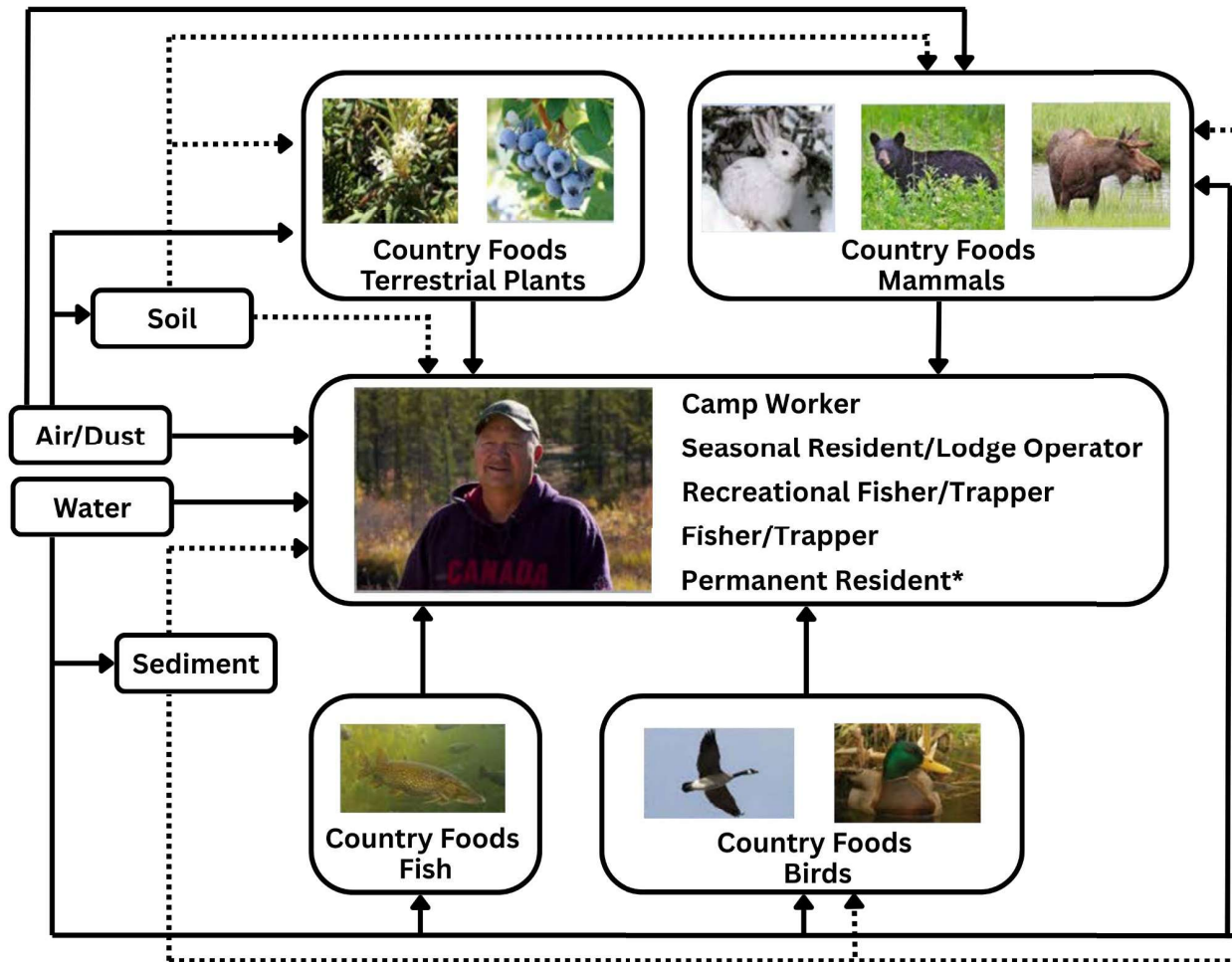
Preconstruction surveys and species at risk monitoring for **all project phases**

Woodland Caribou

Project takes up **0.001%** of the Boreal Shield Caribou Management Unit (SK1)

The Environmental Assessment

A comprehensive environmental risk assessment



Established

modelling method, which considers Project emissions in relation to wildlife and human use

Informed

by **extensive knowledge** from land users in the immediate Project area

Augmented

with **ERFN specific** traditional food study findings

Residual

Project effects on human health are **not significant**

The Environmental Assessment

All aspects considered and requirements met

- ✓ robust review process
- ✓ intensive engagement
- ✓ substantial commitments

The EA demonstrates that Denison can safely...

- ✓ construct
- ✓ operate
- ✓ decommission

with no significant adverse residual or cumulative effects to the biophysical or human environments

4 Licence to Prepare Site and Construct

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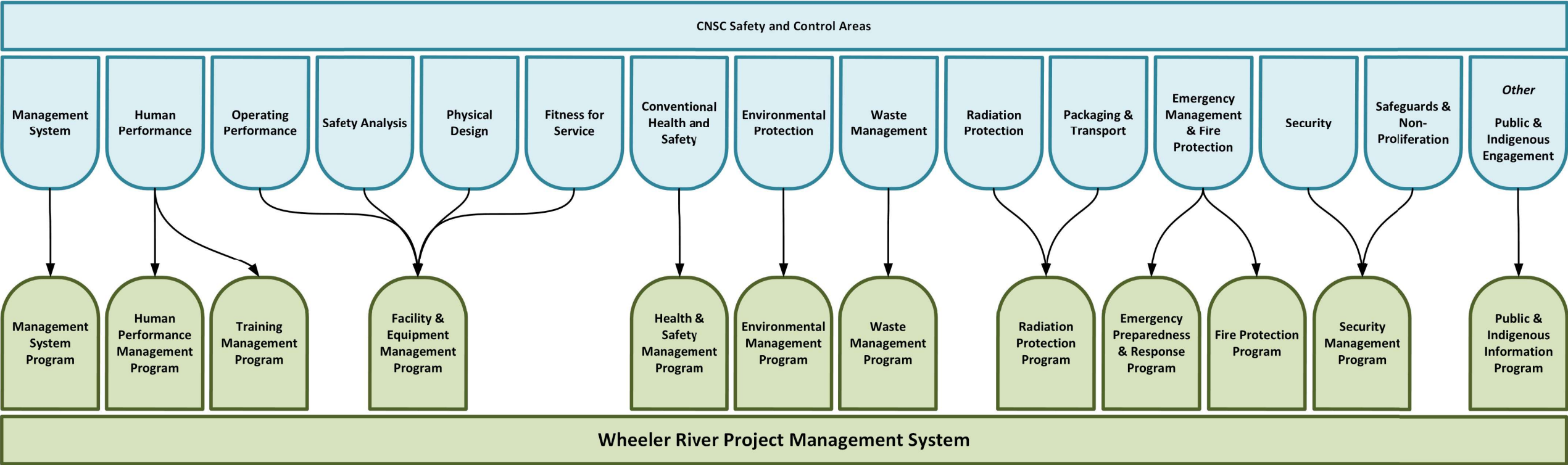
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Wheeler River Project Management System

Development of modern systems to meet CNSC requirements



Human Performance

Establishing a culture of care & competence



Communicate
policies and priorities

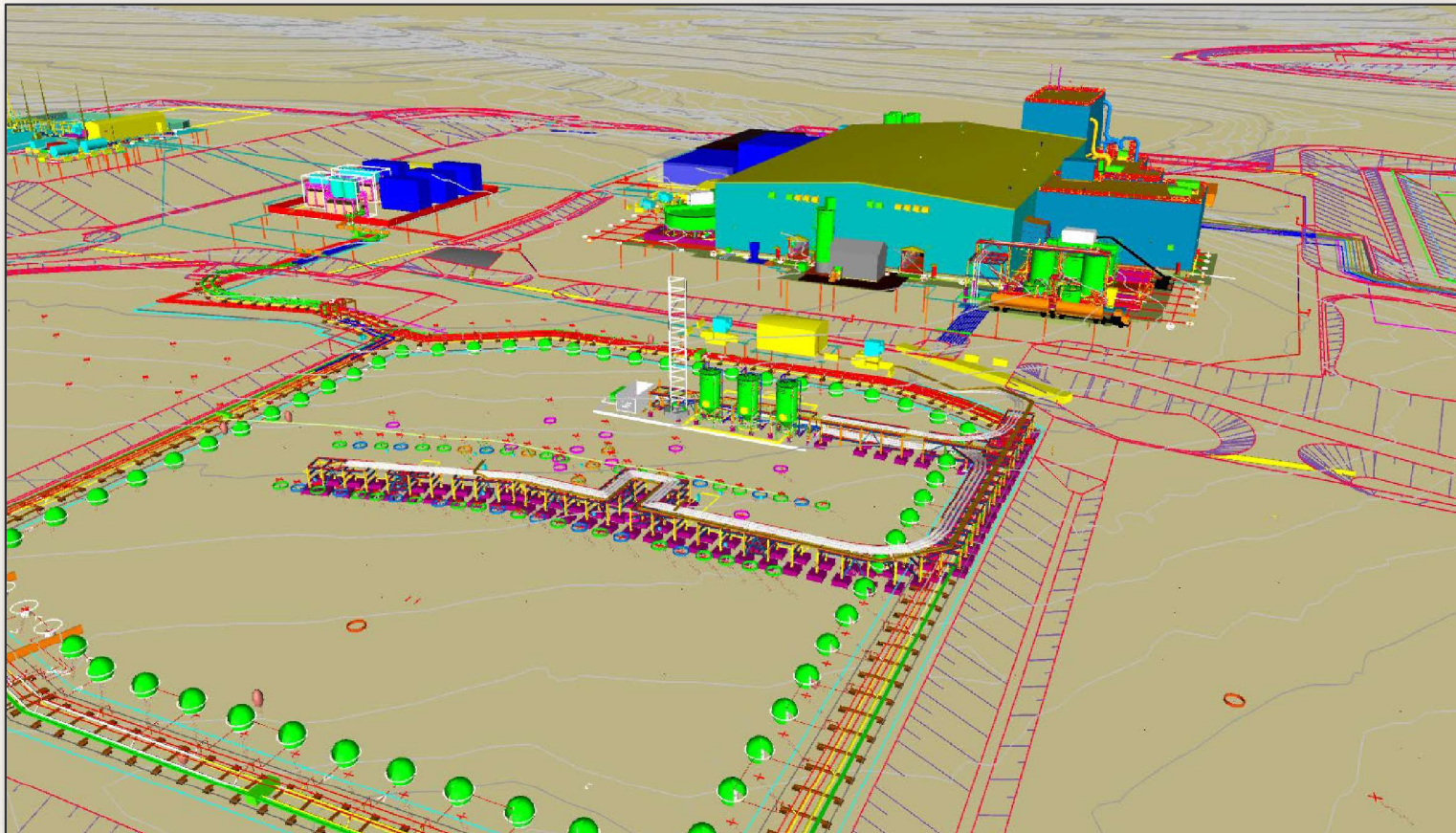
Adherence
to a Systematic Approach to Training (**SAT**)

Support
workers through **training**, planning, and
standards of performance

Promote
organizational **learning**

Physical Design & Safety Analysis

Essential part of a rigorous design basis for the Project



Designed

for safety, maintenance and operations

Engineering

design **standards** and control plans followed

Human factors

incorporated into **engineering**

Project Risk Registry

established

Operating Performance

Aligning contractors & suppliers with project performance expectations



Construction

planning and scheduling
ensures work progresses in a
controlled manner

Commissioning

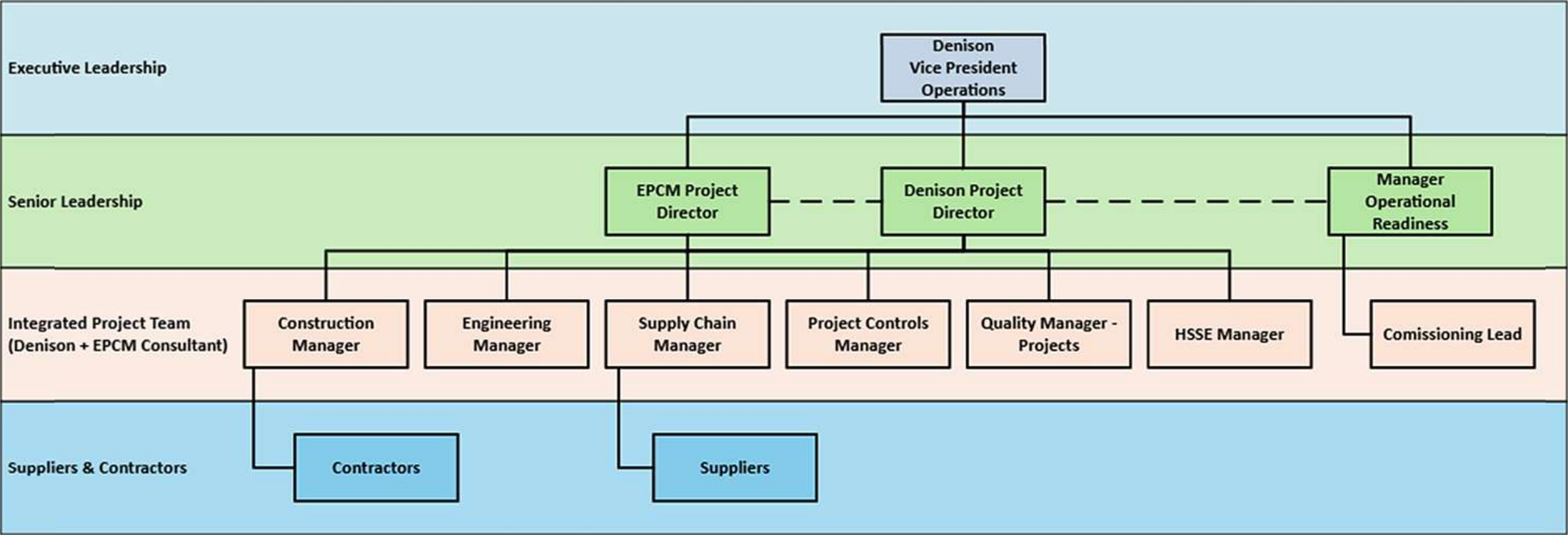
activities follow quality control,
inspection, and test plans

Management

of change requires design review
and **approval**

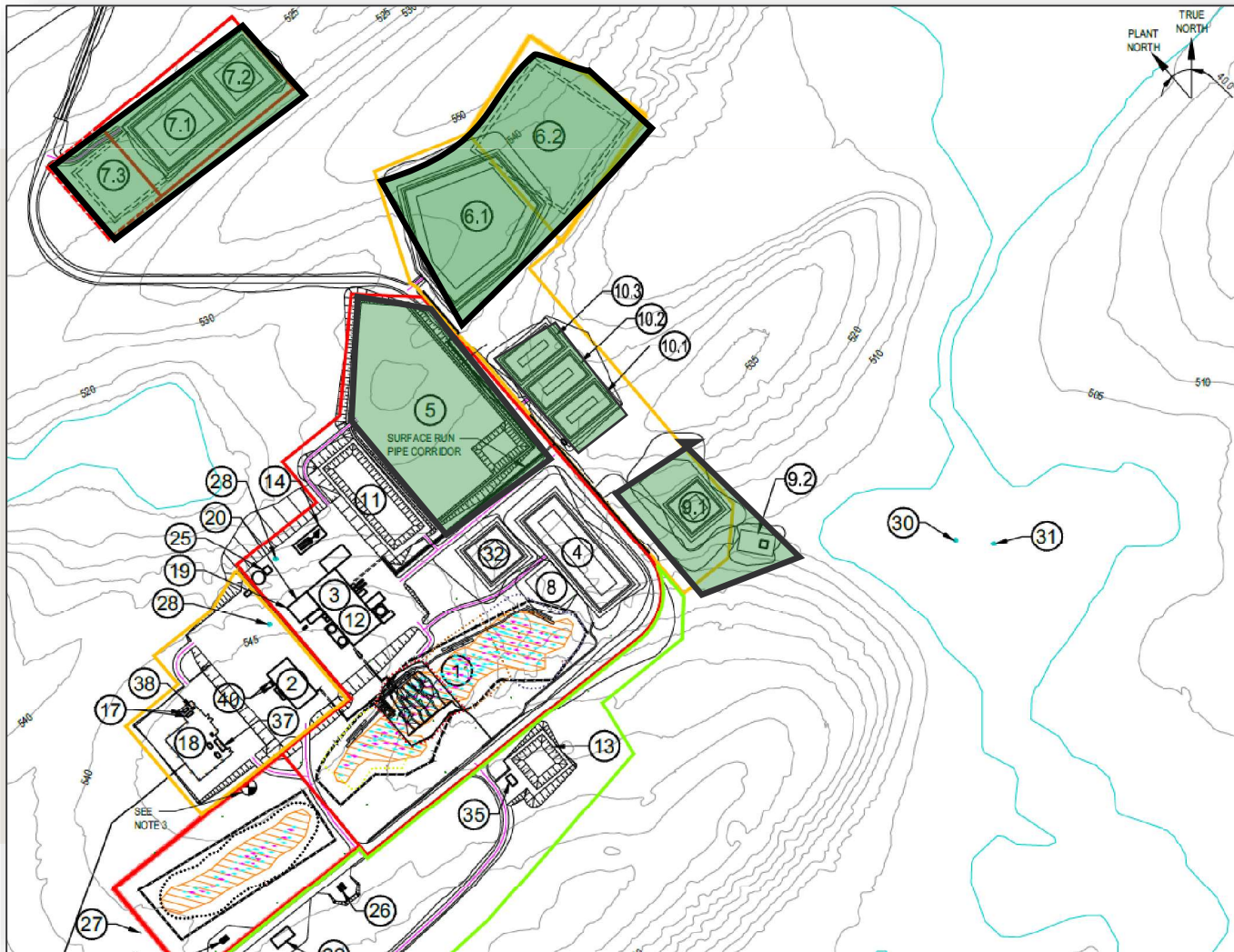
Operating Performance

Effective organizational structure to execute & manage licensed activities



Waste Management

Characterization, minimization & proper practices



Establish

waste management characterization and **control** measures

Proper

deposition of wastes in **appropriately** designed facilities

Transportation

of waste materials offsite, where appropriate and approved

Conventional Health & Safety

Managing hazards & protecting workers



Establishing
a strong health and
safety **culture**

Empowering
workers to be
health and safety
promoters

Management
of workplace safety
hazards

Reporting
and investigating **to**
learn from safety-
related events

Safety by design

Radiation Protection

Monitoring, controlling & maintaining ALARA



Development

of a Radiation Code of Practice

Maintaining

controls on radiation exposure and contamination potential

Monitoring

worker **doses**

Environmental Protection

Comprehensive program that considers the past, present & future



Adhering

to Environmental Management Program, which ensures monitoring and evaluation of environmental **parameters**

Meeting

regulatory **expectations** through training and awareness

Engaging

through audits and **inspections**

Reporting

and investigating **to learn** from operational incidents



Emergency management & fire protection

Designed to prepare & respond effectively



Preserving

the safety of the emergency response team

Protecting

human life

Protecting

the environment

Protecting

property

5 Decommissioning & Financial Guarantee

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Wheeler River Uranium Project

A joint venture between Denison (90%) and JCU (Canada) Exploration Company Ltd. (10%), with Denison as operator. Effective August 3, 2021, Denison acquired 50% of JCU.

Welcome Tānsi pihtikwī
Hoʔa Tānisi pihtikwī

We acknowledge and respect that we are working within the boundaries of Treaty 10, in the traditional territory of English River First Nation, in the homeland of the Métis, and within Nuhenéné.

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TSX: DML | NYSE American: DNN

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 **Denison Mines**

Decommissioning & Financial guarantee

Fully costed & in place for licensed activities



Preliminary Decommissioning Plan

developed to reflect this stage of licensing

Scope

based on project components, including both subsurface and surface infrastructure

Planning

considers active decommissioning for ~5 years and post decommissioning monitoring ~10 to 15 years

Required Financial Assurance

issued to the Province of Saskatchewan within 60 days of positive licence decision



Thank you

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