



## **Overly Restrictive Land Management in the Regions of Thaidene Nene and the Southeastern NWT**

### **Key Messages**

- Mining provides significant socio-economic benefits to the NWT and its residents. It is the largest private sector contributor to the economy, and the largest single private sector employer of Aboriginal northerners.
- Keeping our mining industry healthy requires successful exploration, which is promoted with good geoscience knowledge, access to lands with high mineral potential, and investment certainty.
- To that end, in the Thaidene Nene and SE NWT regions:
  - Geoscience knowledge is not good;
  - The most attractive hydropower opportunity in the NWT has not been assessed in the Thaidene Nene MERA;
  - Access to land has been blocked for possible mineral development and is unbalanced and overly restrictive; and
  - Investment uncertainty in the region is significant.
- The Thaidene Nene land withdrawal is too large and compromises too much potential for mineral development and its opportunities and benefits.
- Medium and high mineral potential areas should be withdrawn from consideration in the park proposal. Rich mineral potential is rare and is worthy of protection too.
- Land access to the entire region around Thaidene Nene and the SE NWT must be rebalanced to not compromise future development opportunities for the benefit of the NWT and its residents.

### **Introduction - Who we are and our interest**

The Chamber of Mines is the champion for mineral exploration and mining in the Northwest Territories and Nunavut. Our industry members are engaged in activities that create significant socio-economic opportunities and benefits through prospecting, exploration and mining.

We are providing this submission in two contexts: generally to inform broader land management in the southeastern Northwest Territories, and specifically as our contribution to the process that is considering the creation of a National Park in the general area of the East Arm of Great Slave Lake and called by some as Thaidene Nene.

For context, devolution of land, water and resource management is ushering in a new age in the Northwest Territories, one of increased local control leading to increased self-reliance. The NWT is now assuming increased control of its future, both economically and environmentally. Since non-renewable resources are the NWT's economic advantage and strength, and are the largest private sector economic contributor, it is critical that the needs of the NWT's main industry be

taken into consideration in land use planning and decision making, to protect and enhance future resource development opportunities and potential.

### **Mining provides significant socio-economic benefits to the NWT**

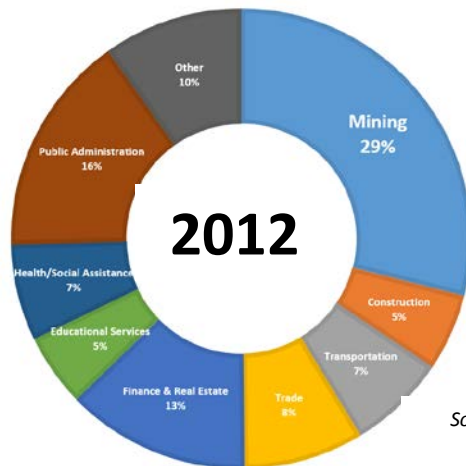
Since diamonds were discovered in the NWT some 20 years ago, the mining industry has made a quantum leap in the way it provides socio-economic benefits to the North and to Aboriginal residents and communities and government.

As documented through government mandated socio-economic reports provided by the mines, benefits to date include:

- Over 19,000 person years of northern employment of which approximately half are Aboriginal.
- Over \$9.3 billion with northern businesses of which over \$4 billion is with Aboriginal companies, the majority of which are brand new Aboriginal companies.
- Significant payments annually to governments and to Aboriginal groups in various taxes and royalties and impact benefit agreement payments.

As a result of these efforts, the minerals industry is the largest private sector contributor to the NWT's economy, and the largest employer of Aboriginal residents.

#### **NWT GDP BY INDUSTRY**



*Source: NWT Economic Outlook 2014-15*

The minerals industry supports the need to protect land and waters from significant environmental effects and does so with direction of legislative and regulatory processes as well as company policies. In addition, industry members of the Chamber of Mines understand and respect the traditional and cultural value that Aboriginal northerners place on the land.

We also believe in the 'art of the possible', that managing and protecting lands and responsibly extracting resources are not 'either/or' situations. We believe that various land management tools besides National Park designation with its permanent protection can be used to maximize economic opportunities for the NWT and its residents while still protecting the environment.

In this context, the region in and around Thaidene Nene and the southeastern NWT must become part of a bigger land management discussion that needs to involve northern governments – public and Aboriginal – northern industry, and other residents.

### **Rich mineral deposits are rare and require protection too**

Mines are built upon anomalous natural accumulations of valuable minerals. Such deposits are rare, and are found where Mother Nature put them and not necessarily where we might wish them to be.

Given the rarity of mineral deposits and their importance to future economic development, they are also deserving of protection for use by, and benefit to, current and future generations.

To sustain and grow our mining industry benefits, we need to find where these rare mineral deposits might be hidden. This requires investments in geoscience by government mapping programs and by focused industry exploration efforts.

It also requires access to land. Maximizing the amount of land accessible to exploration increases the odds of exploration success and, given the comprehensive and rigorous environmental protection regime in place in the NWT today, does not compromise protection of the environment.

The Thaidene Nene candidate area hosts some very good mineral potential that, if developed, could provide socio-economic benefits to the traditional users of the region, to the Northwest Territories and to Canada.

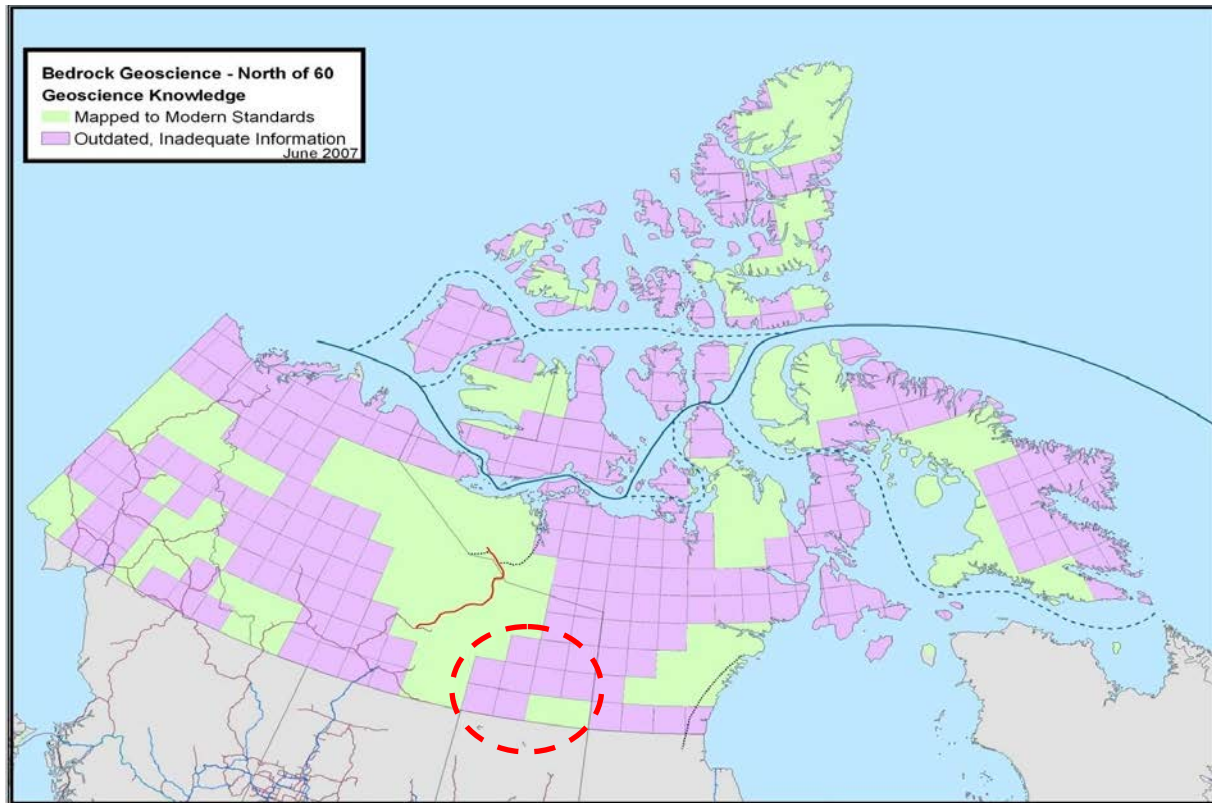
An example of how the significant benefits of a mine could be lost by permanent land alienation through a National Park designation is presented in the table below.

<b>Park Benefits vs Mine Benefits</b>		
	<b>Nááts'ihch'oh National Park</b>	<b>NWT Diamond Mine</b>
<b>Land loss</b>	<ul style="list-style-type: none"><li>• Permanent – 7,600 sq.km.</li></ul>	<ul style="list-style-type: none"><li>• Temporary – 12 sq.km.</li></ul>
<b>Northern hiring preference</b>	<ul style="list-style-type: none"><li>• ~ 5 permanent jobs</li></ul>	<ul style="list-style-type: none"><li>• 500+ jobs</li></ul>
<b>Training positions</b>	<ul style="list-style-type: none"><li>• 2 – 3-year positions</li></ul>	<ul style="list-style-type: none"><li>• 8-18 apprenticeships annually</li><li>• Adult learning centre</li><li>• Aboriginal Leadership Development training</li><li>• Much, much more training</li></ul>
<b>Scholarships</b>	<ul style="list-style-type: none"><li>• one time \$50k</li></ul>	<ul style="list-style-type: none"><li>• 20+ years, life of mine and total to date exceeds \$1 million</li></ul>
<b>Annual business payments</b>	<ul style="list-style-type: none"><li>• No guarantees</li></ul>	<ul style="list-style-type: none"><li>• \$10s-100s millions</li></ul>
<b>Annual IBA cash payments</b>	<ul style="list-style-type: none"><li>• ~ \$100,000</li></ul>	<ul style="list-style-type: none"><li>• ~ \$4 million</li></ul>

### **Geoscience is inadequate and not mapped to modern standards**

The governments of Canada and the Northwest Territories recognize that geoscience in much of the North is outdated, not mapped to modern standards, and this inadequate information impedes exploration, investment, and development.

In particular, geoscience knowledge is outdated and inadequate in the southeastern region of the NWT, the area around and beyond Thaidene Nene (see Fig. 1). Efforts have now begun through the Federal GEM program to begin addressing this shortcoming.



**Fig. 1: Geoscience mapping is inadequate around Thaidene Nene and the entire southeast NWT (area circled). Map by Government of Canada**

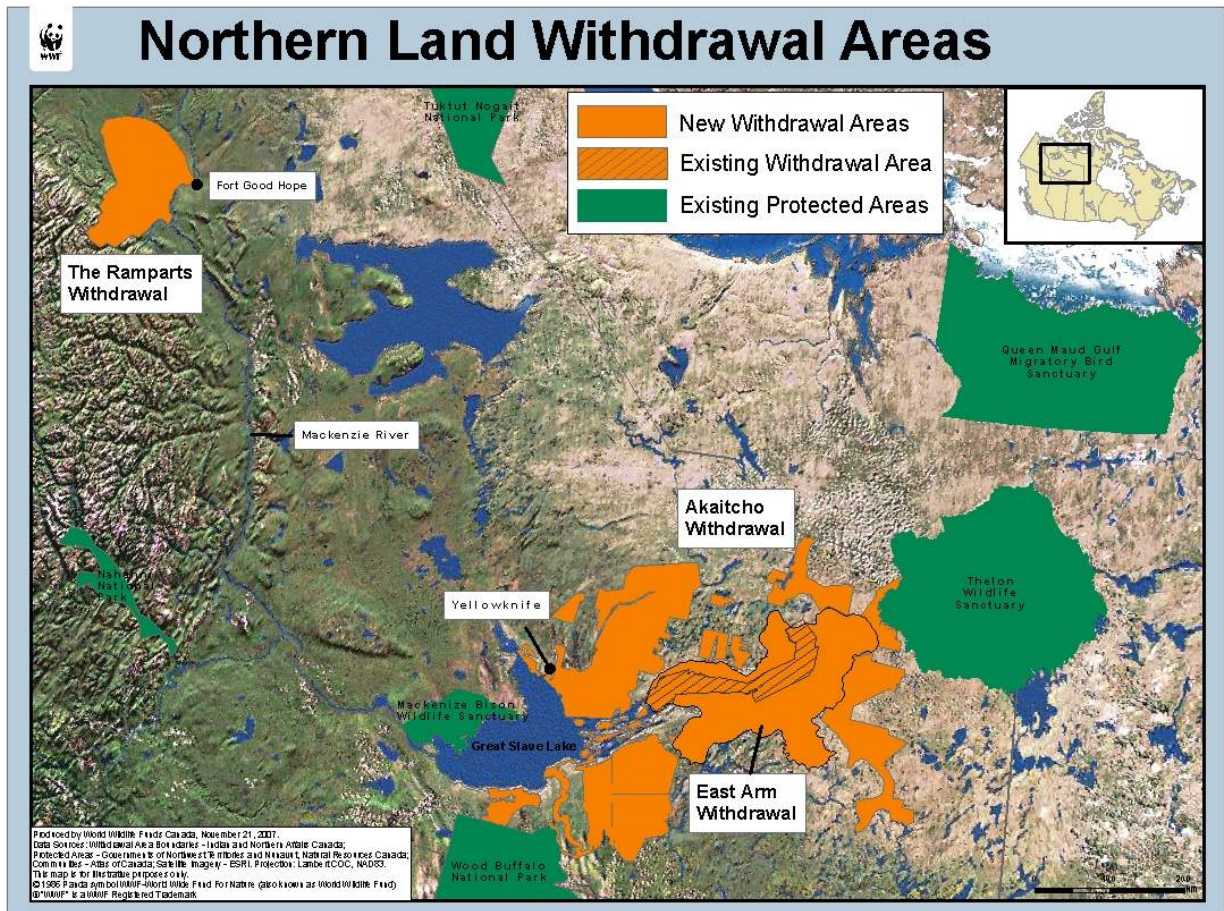


### Access to land in SE NWT is becoming unbalanced and overly restrictive

A number of land management actions and proposals are blocking and encumbering mineral exploration and development in a broad corridor from Great Slave Lake eastward through the area around the Thaidene Nene withdrawal and even further to the Nunavut border and beyond.

These land management actions include land claim land withdrawals, an effective moratorium on uranium development, a historical game sanctuary, and by the investment uncertainty on additional surrounding lands created by those who wish to expand protection even further.

A few of these withdrawals are shown in the map below (Fig. 2) with additional land encumbrances described in the following pages.



**Fig. 2: The combination of existing Thelon Game Sanctuary, Akaitcho land withdrawals, and Thaidene Nene is alienating too much land from development in the SE NWT. There are additional encumbrances to development not shown on this map but described in this submission. Map by World Wildlife Fund**

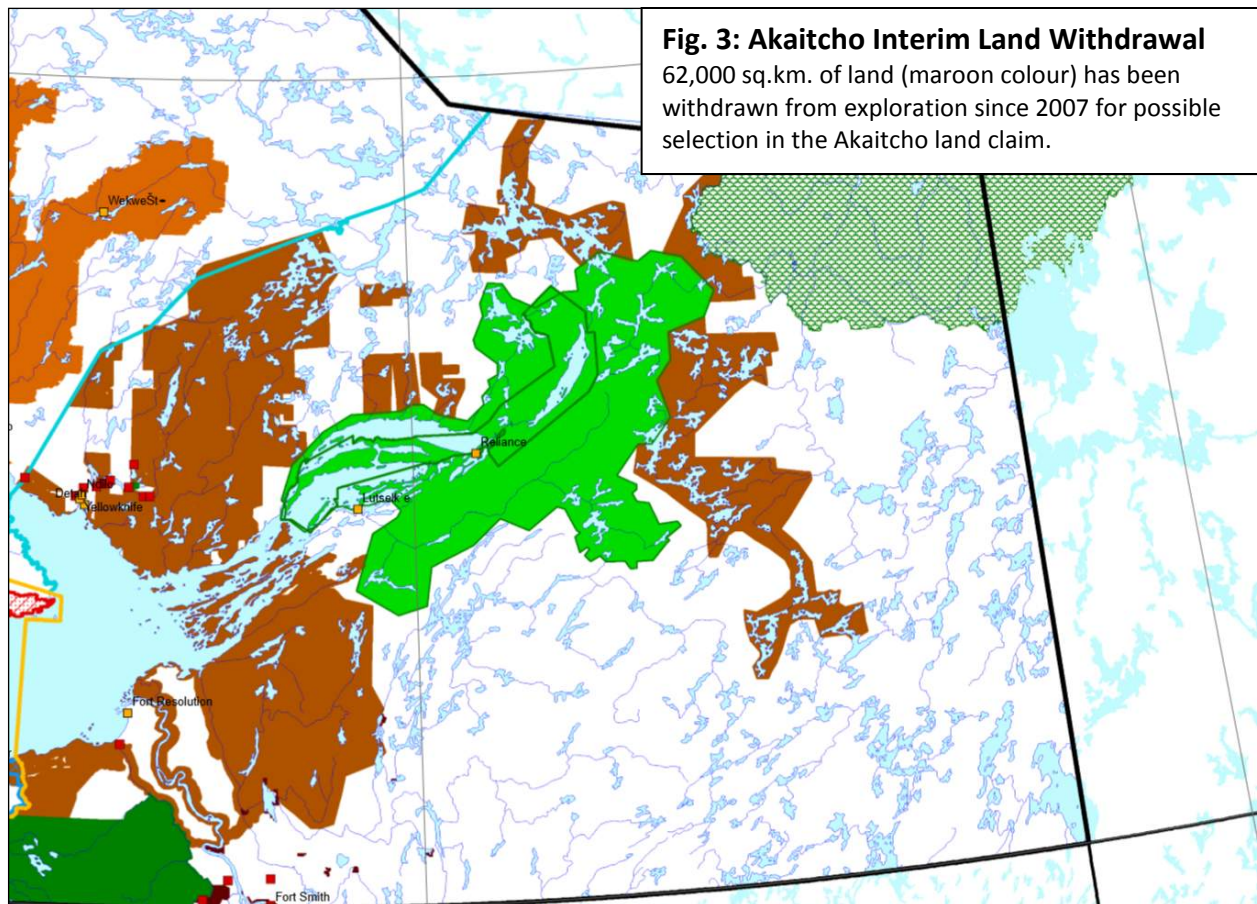
### ***Akaiitcho Land Claims Interim Land Withdrawal***

The southeastern portion of the NWT is subject to a number of Aboriginal land claims, including the Akaiitcho Dene First Nation, the Northwest Territory Metis Nation, and overlaps with Aboriginal groups in Saskatchewan and Manitoba.

In 2007, to support the Akaiitcho land claim negotiations, the Federal Government withdrew approximately 62,000 square kilometres of surface and subsurface lands from development (Fig. 3). This was originally a 5 year moratorium on exploration but has now been increased by another 5 years and these lands remain withdrawn today. No exploration can take place on or under these lands.

Since much of this land has known high mineral potential, its withdrawal from exploration over this length of time has contributed to declining investment in the NWT.

The minerals industry recommends the speedy resolution of land claims to re-establish access and investment certainty.



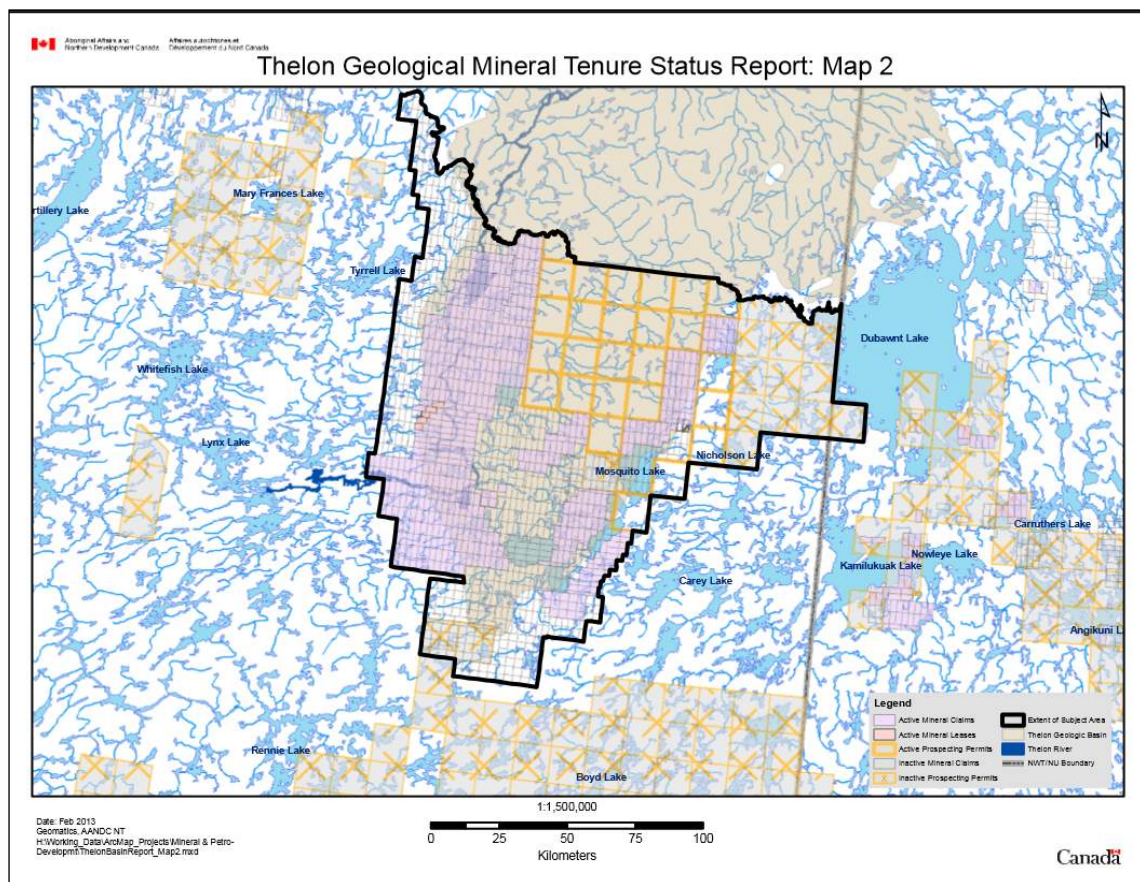


***Akaiitcho communities have created a de facto moratorium on uranium exploration***

In 2005-2006, increasing global interest in uranium created a staking rush in the southeastern NWT, over a known uranium rich region southwest of the Thelon Game Sanctuary (Fig. 4). The region has been compared geologically to the uranium rich Athabasca Basin of northern Saskatchewan, which has made Canada a major global uranium producer to the benefit of Aboriginal communities, Saskatchewan and Canada.

Over 18,000 square kilometres of claims, leases and prospecting permits were acquired by industry at considerable cost in preparation for exploration. However, during the regulatory process, the Akaiitcho community of Lutsel K'e expressed concerns over grassroots exploration occurring here, and effectively blocked exploration over the huge area. Government attempted to create a land use planning process – the Upper Thelon Land & Resource Management Plan – but weak efforts did not resolve the issue. As a result, the Akaiitcho essentially created a “moratorium on uranium” in this large region, and a region of very high uranium potential remains sterilized from development today.

Companies that invested millions of dollars to legally acquire mineral rights on Crown lands open to exploration were stymied from exploring and had to walk away from their investment. This added significant investment uncertainty in not only the Akaiitcho region, but also the NWT.



**Fig. 4: 18,000 square kilometres of mineral tenure over highly attractive uranium mineralization has been sterilized from development for over 7 years.**

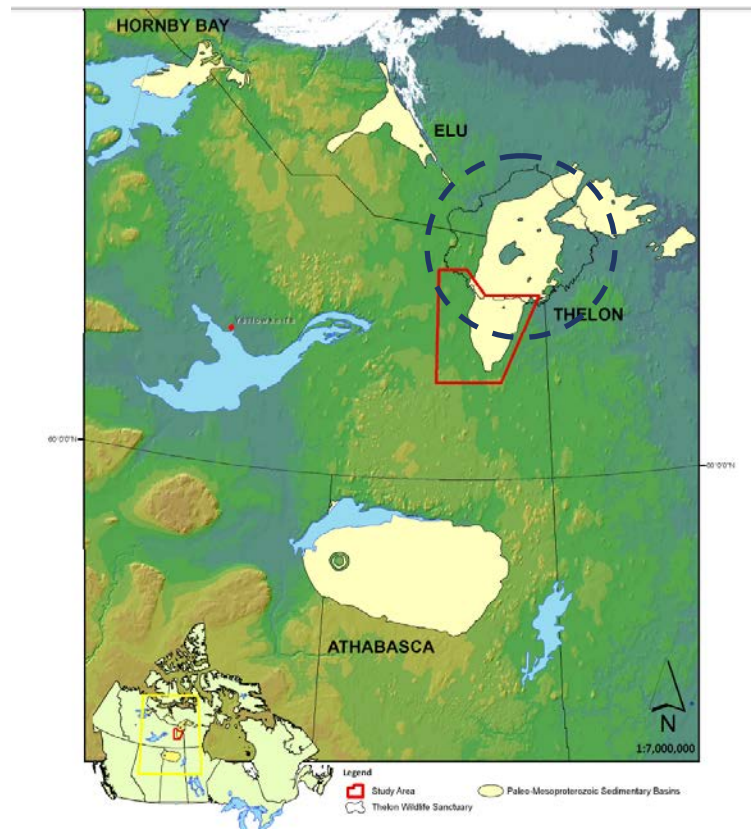
### ***Thelon Game Sanctuary***

The southeastern NWT region already hosts the largest game sanctuary in Canada, the Thelon Game Sanctuary which straddles the NWT/Nunavut boundary. It is 52,000 square kilometres in size, over twice the area of Belgium.

The Game Sanctuary was created in 1927 to protect muskox and caribou from the potential damage by market and other overhunting witnessed around the turn of the last century in other parts of the United States and Canada. This threat no longer remains, and muskox and barren ground caribou are not listed as endangered or threatened. Yet the Game Sanctuary remains in place and there are some that would want to increase its size.

Changes are possible. The Sanctuary was decreased in size in the 1950s to accommodate resource potential recognized in the southwest. The Nunavut Land Claims Agreement requires the creation of a Thelon management plan and has clauses that could alter the Sanctuary's boundaries or status, including even "to disestablish" it.

Geoscience research reveals that the Sanctuary also covers a sedimentary basin that geoscientists compare to the uranium rich Athabasca Basin of northern Saskatchewan, which has made Canada a major global uranium producer to the benefit of Aboriginal communities, Saskatchewan and Canada.



**Fig. 5: The Thelon Game Sanctuary straddles the uranium-rich Thelon Geological Basin, which compares favourably to the uranium-rich Athabasca Basin in Saskatchewan.**

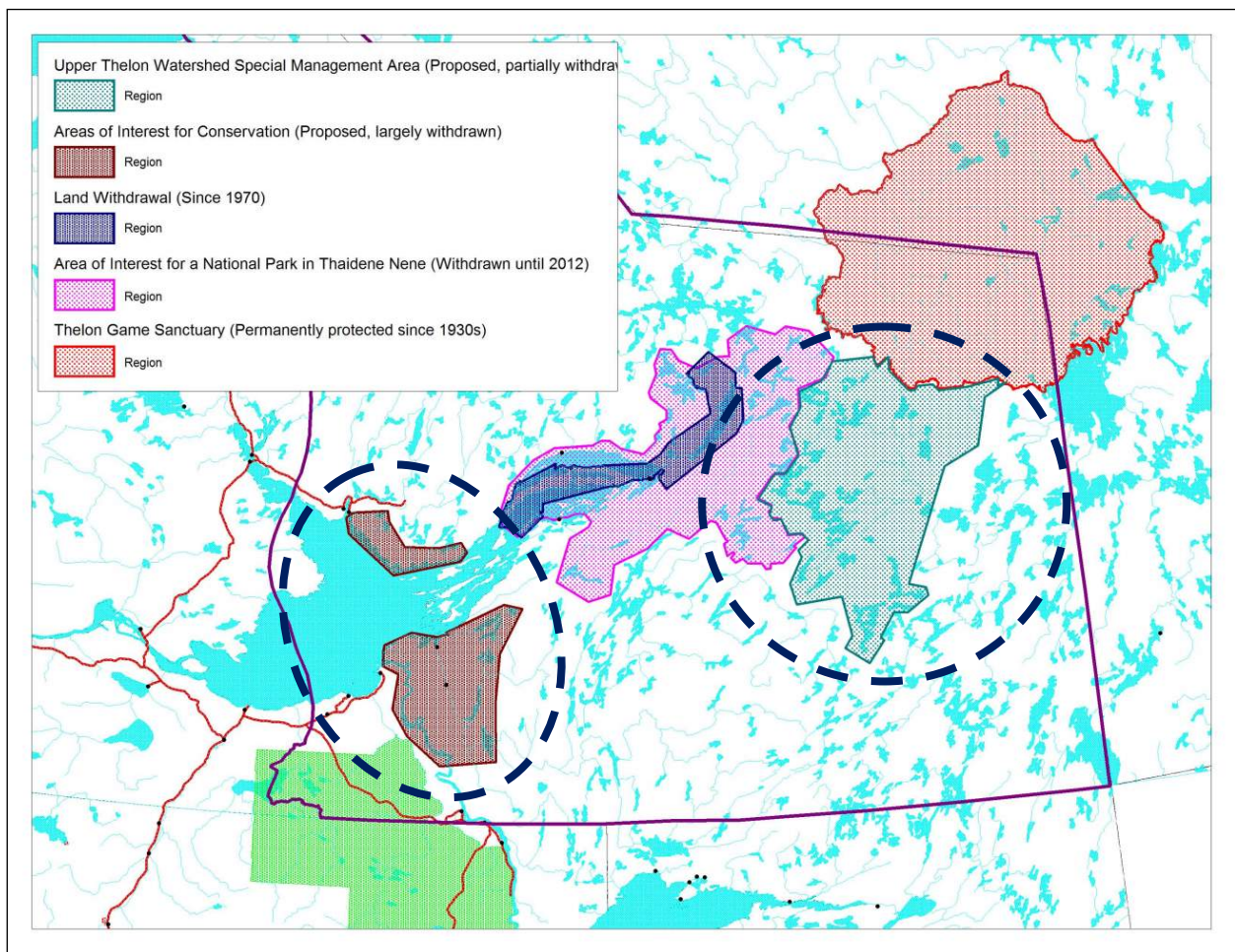


### ***Additional pressures on land protection***

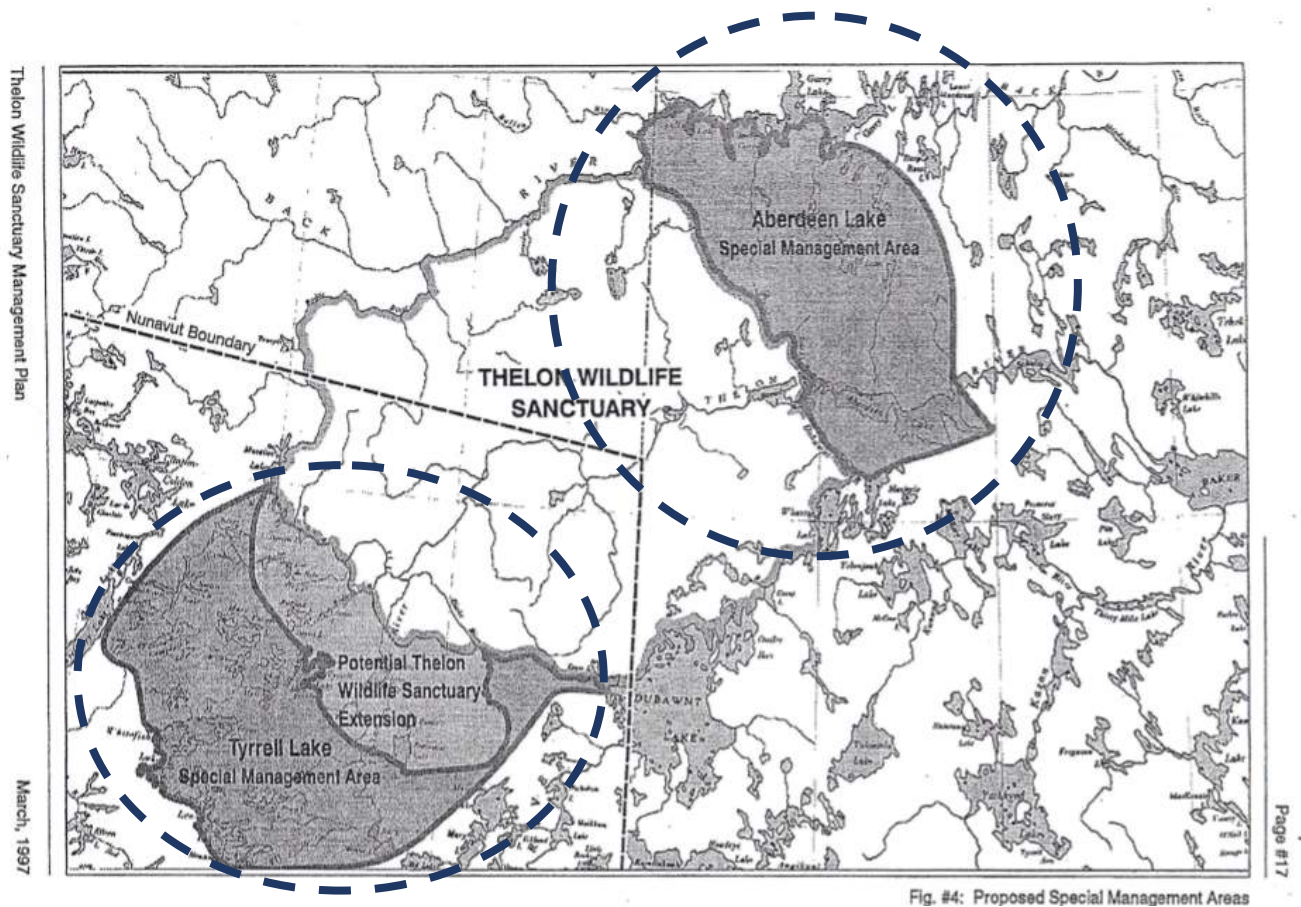
There are some in government and civil society who would want to add further protection to the southeastern NWT.

In recent years, discussions have taken place to add additional special management areas to the Thelon Game Sanctuary and in areas north and south of Great Slave Lake (see Fig 6 and 7). This is a disturbing trend that biases land management even further towards alienation of lands to development.

The cumulative effects of significant focus on protection vs development is having consequences to the NWT, which is a jurisdiction that relies on mining as its largest economic contributor.



**Fig. 6: There have been discussions in recent years to add further protection imbalance by proposing additional land management protection that could alienate development in the southeast NWT.**



**Fig. 7:** Some have expressed a desire to provide even more protection to the Thelon Game Sanctuary in both the NWT and Nunavut (circled areas). This would likely seal the fate of any development in this mineral rich region. The Thelon Game Sanctuary straddles much of the uranium-rich Thelon Geological Basin, often compared to the uranium-rich Athabasca Geological Basin in Saskatchewan.



### **Thaidene Nene National Park proposal adds further bias against development**

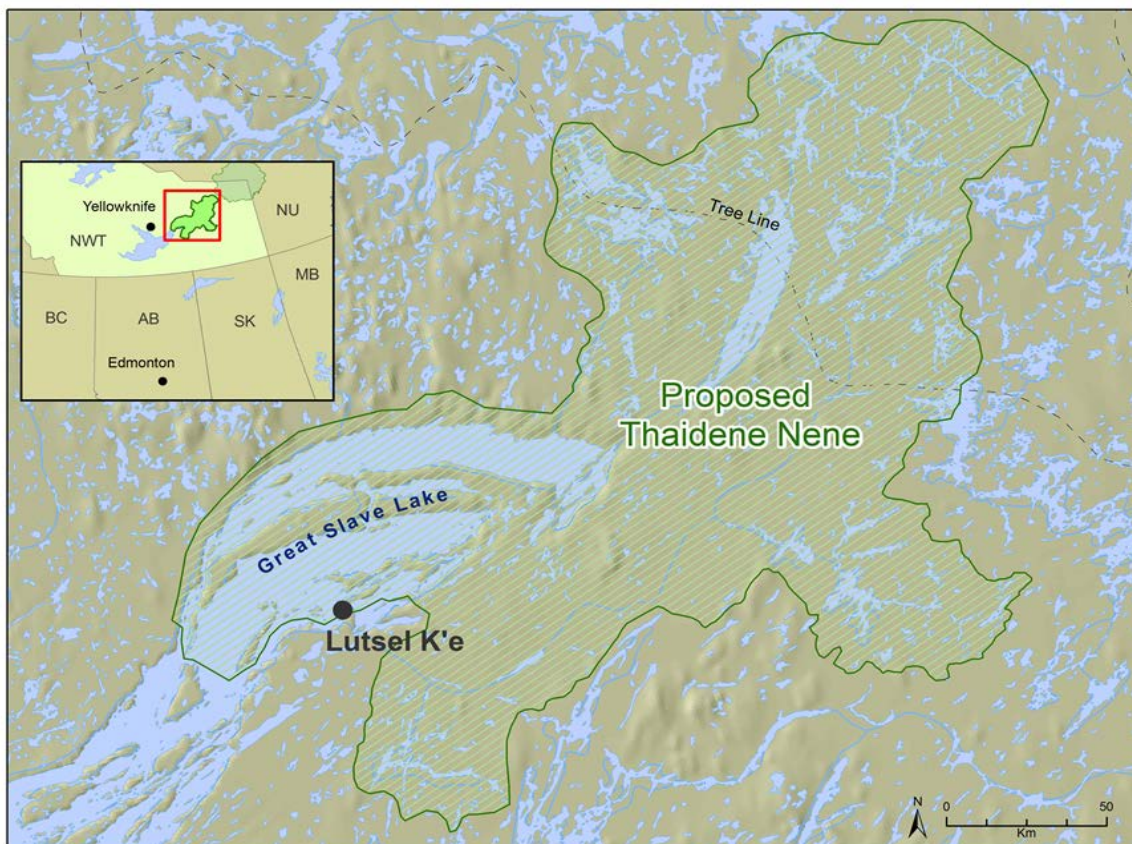
The proposal to create a large national park is a significant cumulative effect to an already access-challenged and very large region of the Northwest Territories.

Specifically in regards to the current Thaidene Nene National Park proposal, we have the following concerns.

#### ***The interim withdrawal area is too large***

The interim withdrawal area being considered for total alienation of mineral development as a National Park is too large (Fig. 8). At 30,000 square kilometres, the proposed Thaidene Nene is approximately the size of Vancouver Island.

The withdrawal captures the entire watershed of the East Arm of Great Slave Lake, an approach that Parks Canada has taken with other northern park proposals. Tongue in cheek, industry hopes that a national park isn't proposed on the Mackenzie River, as the watershed stretches all the way back through Alberta into northern British Columbia!



**Fig. 8: The proposed Thaidene Nene region, an area larger than Vancouver Island.**



***Thaidene Nene MERA is incomplete***

Although the MERA report is well written, it was completed with a limited budget of only \$1.5 million. Our industry members observe that with this investment, it could at best only be a cursory report. To use the words of the resource assessment conducted on another potential protected area (Łue Túé Súlái, NWT), “the degree of uncertainty in this assessment must be high due to a lack of information”. To quote the MERA itself, “... there will always be uncertainties associated with resource potential analysis that can only be lessened through renewed investigations using the most current knowledge as future land use issues arise.”

- **Study area is geologically complex** – The 30,000 square kilometre study area is very large and is geologically complex. It is at the juncture of 5 geological zones/provinces: Slave, Taltson, Thelon, Rae-Churchill, and Great Slave Supergroup. This added complexity adds further uncertainty to the completeness of the MERA.
- **Low resolution starting point** – Existing regional geoscience is weak (see Fig 1), and previous mapping of the region was conducted at a low resolution of only 1:1 million and in some areas at 1:250,000, providing a low level of data.
- **Small MERA Budget** – The total budget to assess an area the size of Vancouver Island was only about \$1.5 million, which is not sufficient for its large size and geological complexity. Industry commonly spends this amount to study an area a mere fragment of this size. For perspective, the MERA budget saw a one-time investment of \$50 per square kilometre. Under the mining regulations, a company must spend a minimum of \$500 per square kilometre every year just to maintain its right to explore.
- **Strong potential identified** – Despite the small budget, the MERA has identified a number of medium to high mineral potential areas throughout the study area, for virtually all commodities modelled including diamonds, lode gold, VMS, SEDEX, IOCG, vein copper, vein and sandstone uranium, chromite and MVT base metal. This is a good indicator that strong mineral potential is more widespread.
- **Missing data, with some strong mineral potential overlooked** – Chamber members indicate that several high mineral potential areas were not identified in the Overall Mineral Potential Summary map including strong potential for base metals in the Reliance and the Artillery Lake areas.
- **Sparse industry data due to lack of geoscience** – Sparse industry data in the central to eastern and southeastern areas might suggest low mineral potential to the uninitiated, but is actually a reflection of poor geoscience data that didn't attract industry investment over the past 50 years. This gap in geoscience data stretches through the entire southeastern corner of the NWT. Part of the region is now the target of work under the Federal GEM (Geo-mapping for Energy & Minerals) research program.
- **Sparse industry data due to uncertainty** – Industry data, which might complement the MERA data, is also low in the Lockhart River to Artillery Lake corridor. This is most likely not due to low mineral potential, rather to the fact that a proposed park boundary

was drawn on the map some 40 years ago. This simple process of drawing lines has been sufficient to create uncertainty over the future status of the land, and drive investment interest away.

- **Missing hydropower energy assessment** – The MERA is weakened by not identifying significant known hydropower potential in the study area and beyond. We are aware of studies conducted on the Lockhart River system in the late 1960s, which identified that the natural combination of river drop and water supply upstream at Artillery Lake creates the most attractive engineering opportunity in the NWT to generate significant hydropower in the range of 200MW. While we are aware that the Akaitcho have cultural concerns over the Lockhart River, we believe that technology may become available that could protect the river and use it to generate power. This could provide much opportunity and benefit to future generations. The Park proposal should not advance without reasoned discussions of hydropower energy options and opportunities.

## **Other Effects of Thaidene Nene**

### ***The proposed Thaidene Nene boundary affects existing projects***

The current boundary for the Thaidene Nene withdrawal comes extremely close to at least three significant mineral deposits – Indian Mountain, Gahcho Kué, and Boomerang to name just a few (see Fig 9). This close proximity is a signal that high mineral potential lands are also captured within the withdrawal line, and that any boundary considered should be moved further away to low mineral potential areas.

In addition, placing a proposed park boundary adjacent to known mineral deposits and projects can bring negative pressure to bear on those projects, as there are some protectionists who would like to see additional buffer zones placed around parks. This can complicate a project's viability, creating uncertainty by needlessly raising sensitivities and frightening away investment.

### ***Thaidene Nene affects transportation access***

Remote mining projects rely on marine shipping, ports, seasonal winter roads, all weather roads, and power transmission lines to support them.

The proposed Thaidene Nene Park boundary encompasses the entire shoreline of the east arm of Great Slave Lake, and compromises access to an even larger region beyond. Currently, there is no consideration for transportation or power transmission access. Without access concessions, the proposed park boundary would effectively stymie mining development opportunities in much of the southeastern corner of the NWT.

Allowances must be given for marine access across the lake to access ports placed at strategic locations on the shoreline from which access roads might reach mineral resources in the hinterland, north, south and east of the proposed park.

***Thaidene Nene affects power development and access***

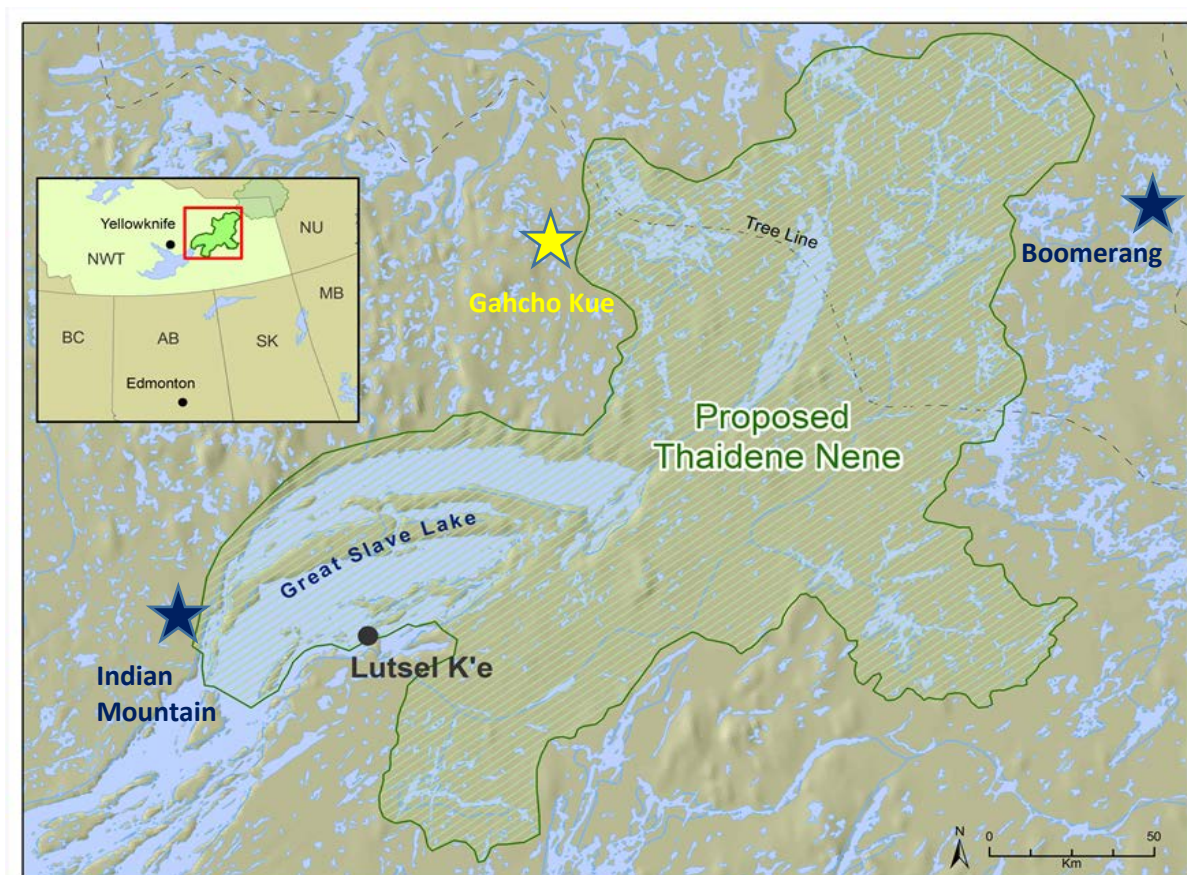
A large park could also block development of hydropower and access for power transmission lines.

Recently, concerns from the Akaitcho community of Lutsel K'e resulted in the cancellation of a proposal to construct a hydropower transmission line northwards from the Taltson River area southeast of Great Slave Lake, crossing the proposed park area and the Lockhart River, to reach the diamond mines further to the north.

Within Thaidene Nene, the Lockhart River itself has been identified as having large hydropower potential. Investigations by hydropower experts in the late 1960s identified some 200MW of power potential in the Lockhart system. This is a tremendous resource that could be one day prove viable, producing both power and protecting cultural values of the river.

We are aware that the Lockhart River holds great cultural significance to the people of Lutsel K'e, however it may also be technically feasible to protect the river and to use it to generate power for the benefit of the NWT and the community. A national park would forever eliminate that option.

Considerations must be given for power access and development in the region.



**Fig. 9: The proposed Thaidene Nene National Park and boundary will affect development of known mineral deposits, a sample of which are shown here.**



## **Recommendations**

The minerals industry is the economic engine of the Northwest Territories and must be protected if it is to provide significant socio-economic benefits to the territory and its residents. Lands in the Thaidene Nene region – and the entire southeastern NWT within and beyond it – can be an important contributor in the future.

Specifically **with respect to Thaidene Nene**, we recommend that governments:

- Reduce the size of the proposed Thaidene Nene Park and open much of the unrequired lands to exploration.
- Invest time and efforts to conduct additional mineral resource investigations, ensuring that any missing data that industry has identified is incorporated.
- Remove all high and moderate mineral potential identified from consideration in a proposed national park.
- Provide for marine access on the lake, placement of ports at strategic locations on the shoreline, and road and power transmission line corridors through the park to high mineral areas in the hinterland beyond.
- Seek other land use management tools that allow for multiple land use, which a national park designation prevents.

More generally, **with respect to the broader southeastern NWT**, we recommend that governments:

- Invest to improve the geoscience understanding of the region.
- Settle outstanding land claims and open any unclaimed lands to exploration.
- Increase land access to industry in the region.
- Use other land management tools than a National Park so as to allow multiple land use. First and foremost, recognize that regulatory instruments protect lands from significant adverse environmental effects. Second, consider flexible land use planning designations to add protection of some lands where justified. Unlike a national park designation which permanently bars development, land use plans are flexible as they can be revisited regularly. Future generations may have different perspectives, and future technologies may further mitigate environmental effects of development. Land use plans can provide temporal protection of lands until public perception or technology changes to address any sensitivity.
- Advance the stalled Upper Thelon Land & Resource Management Plan in the Thelon River area so as to remove the unofficial uranium “moratorium” in the high mineral potential Thelon Geological Basin.
- Do not permanently withdraw any lands with moderate to very high mineral potential. These are also rare and are worthy of protecting for economic development reasons. At the very least, limit such withdrawals, and do so with temporal land use designations, that have the flexibility to be changed when needs or technology change. Given that there are strong environmental regulations in place, these lands can be developed without any significant adverse environmental effects.

*Submission on Thaidene Nene National Park and other Protections in SE NWT*

Land access in the southeastern NWT has become problematic due to a combination of factors including a national park proposal, land claims negotiations, community concerns, and attractive mineral potential.

In this post devolution world in which mineral exploration and mining offers government and communities significant opportunities, we recommend a discussion begin based on the GNWT's recently released "Northern Lands, Northern Leadership – The GNWT Land Use and Sustainability Framework", to address the recommendations that we have put forward in this submission.

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