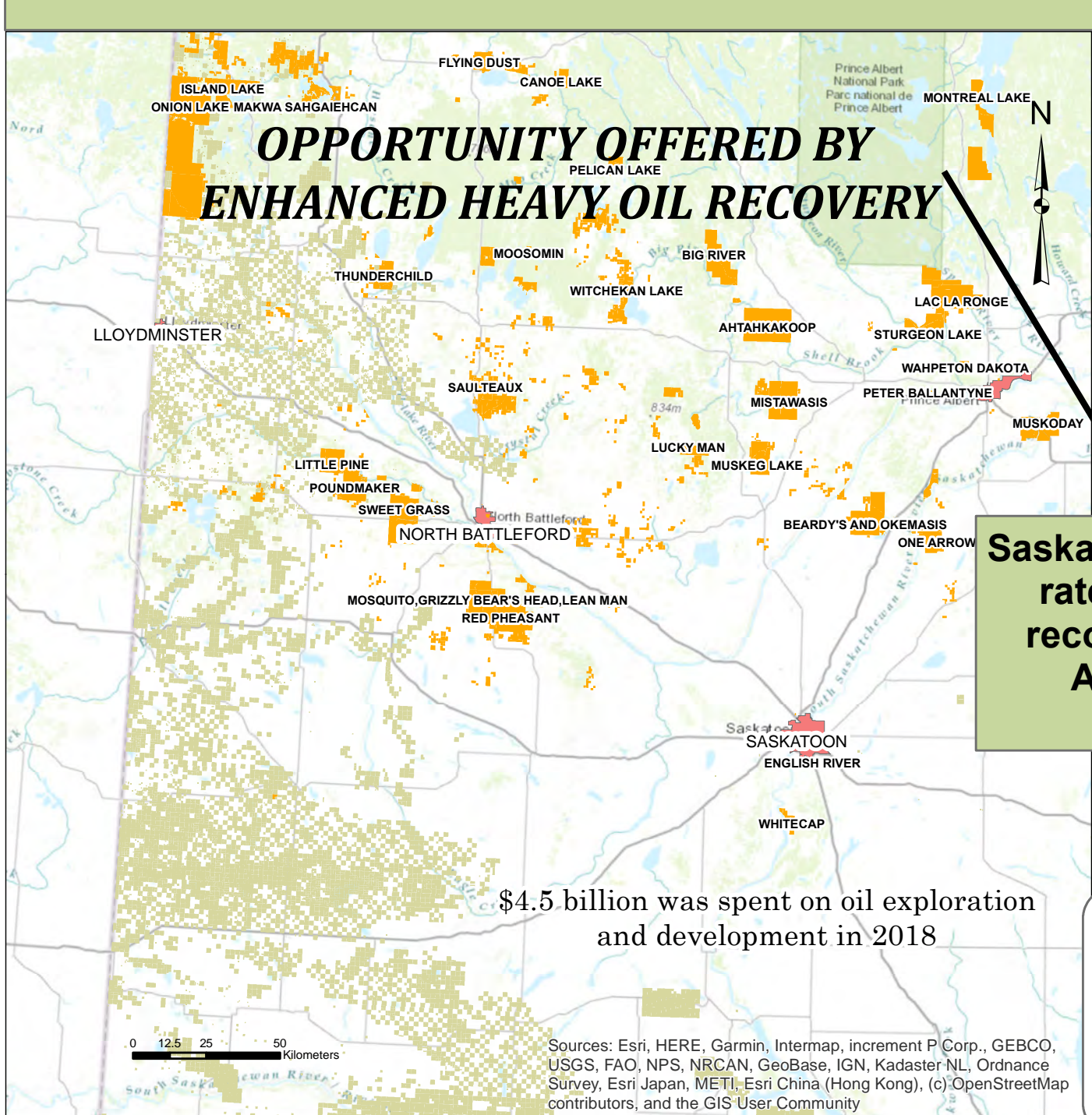


# SASKATCHEWAN GROWTH PLAN RESOURCE MAP TO 2030

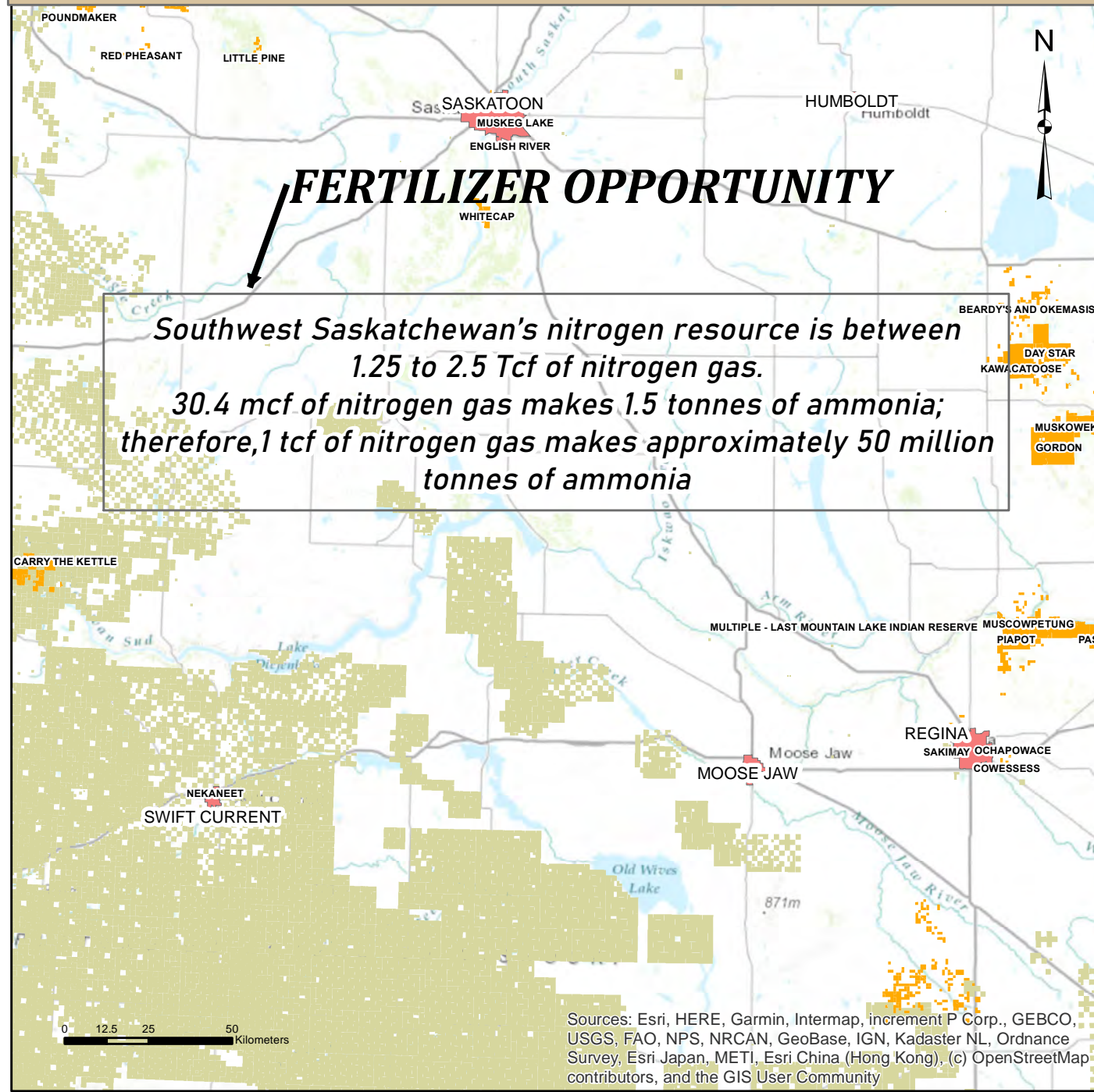
## HEAVY OIL IN SASKATCHEWAN



Saskatchewan's heavy oil resource is immense however recovery rates are historically low in the range of 10%. Increasing the recovery by 10% will make an additional 283 million m3 of oil. Application of tertiary miscible flooding may be a way to further exploit this resource.

**The Indigenous People WE RESPECT**  
The United Nations Declaration on the Rights of Indigenous Peoples Article 23 and the Truth and Reconciliation Report Call to Action Number 92

## NITROGEN GAS IN SASKATCHEWAN



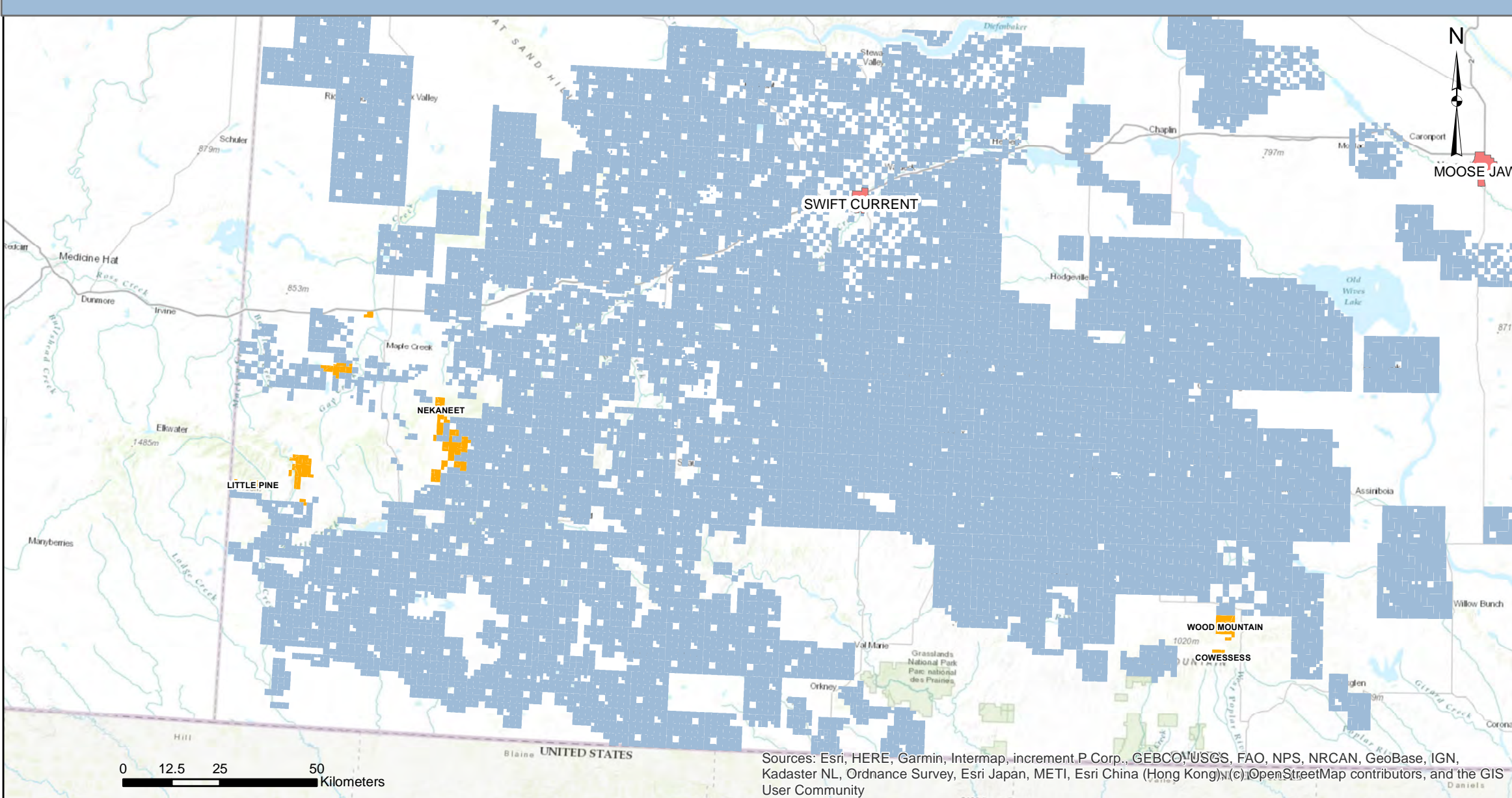
183.9 bcf of natural gas was produced in 2018 and a remaining recoverable reserve of 1.8 tcf. Chemical fertilizers need natural gas.

## HELIUM EXPLORATION



**Helium and Co-Production of Carbon Dioxide and Nitrogen**  
A 1987 SEM Study presented a CO2 resource of between 1 and 2 tcf. It stated that 1 tcf of CO2 may lead to incremental oil production of 31.8 million m3, about equal to the amount of oil needed to reach the Growth Plan's production target. This gas could be pipelined north to the heavy oil fields of west central SK or east to the light oil fields of southeast SK. The same study can be used to estimate the amount of helium contained in these inert gas streams. The amount ranges from 21.5 to 43 bcf. This is valued at \$2.3 to \$4.7 billion as raw helium gas to \$32.3 to 64.6 billion if refined and liquified.

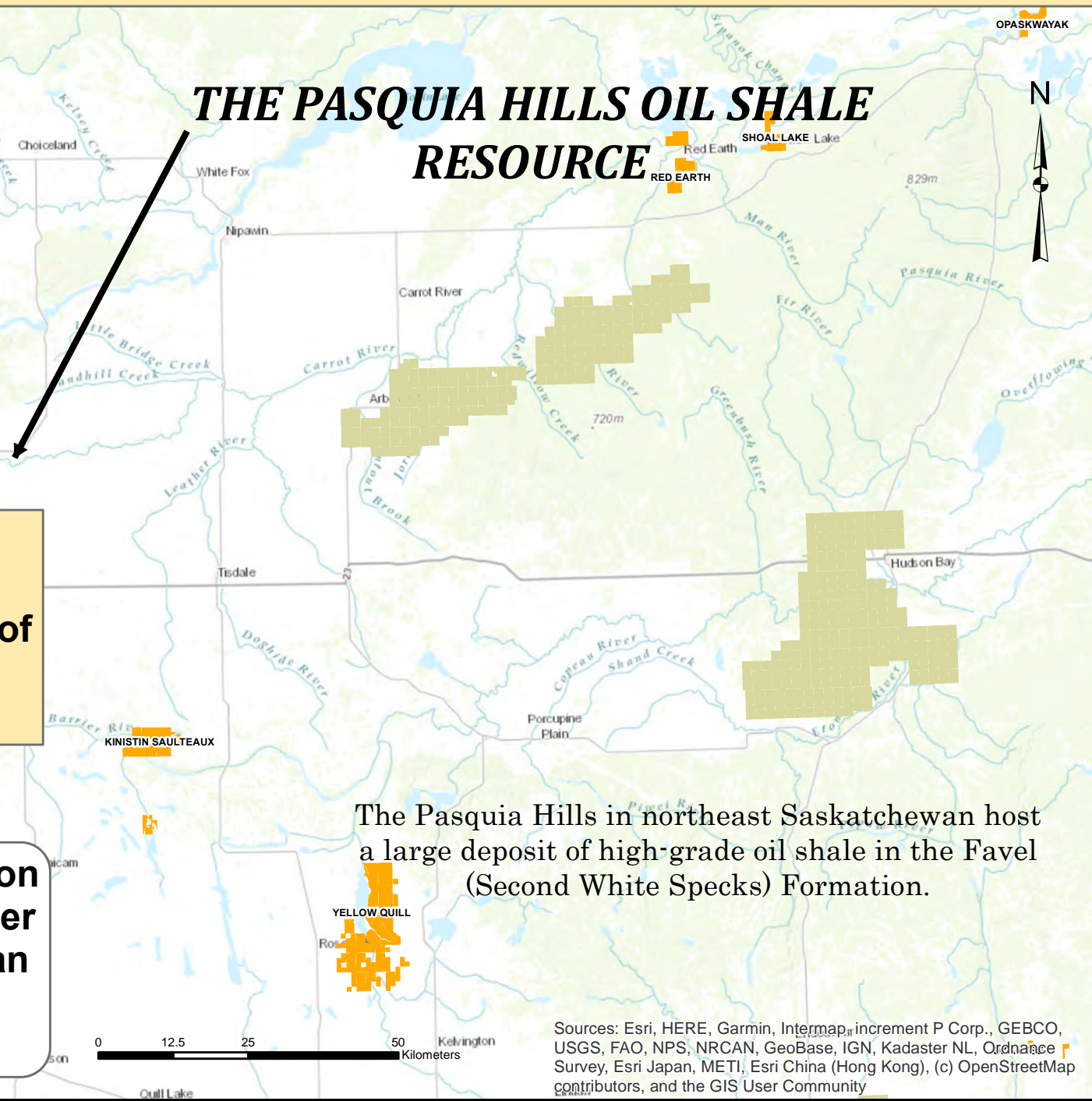
## HELIUM RESOURCE IN SASKATCHEWAN



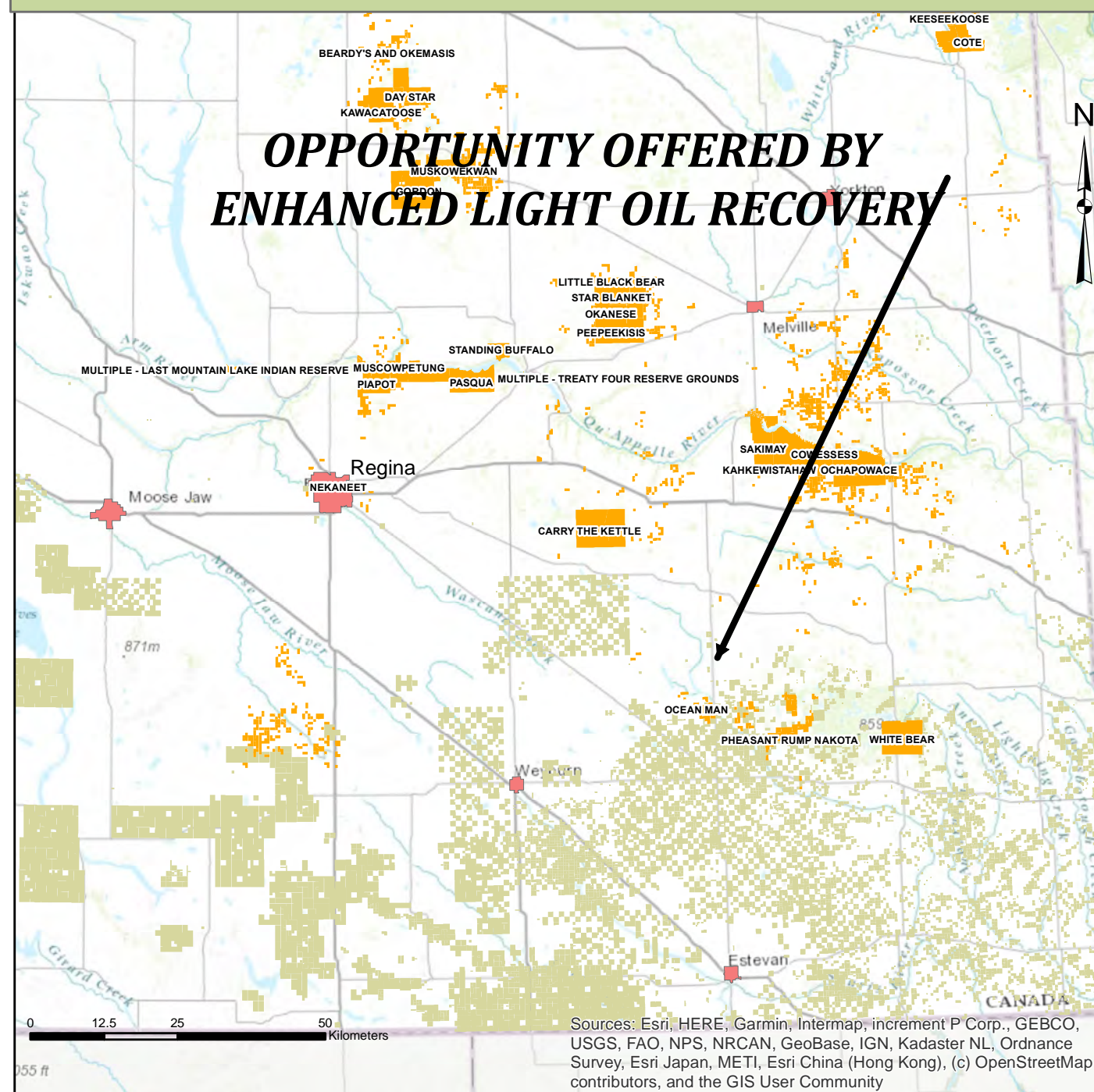
## CONVERTING RESOURCE VISION INTO ECONOMIC VALUE



## OIL SHALE IN SASKATCHEWAN



## LIGHT OIL IN SASKATCHEWAN



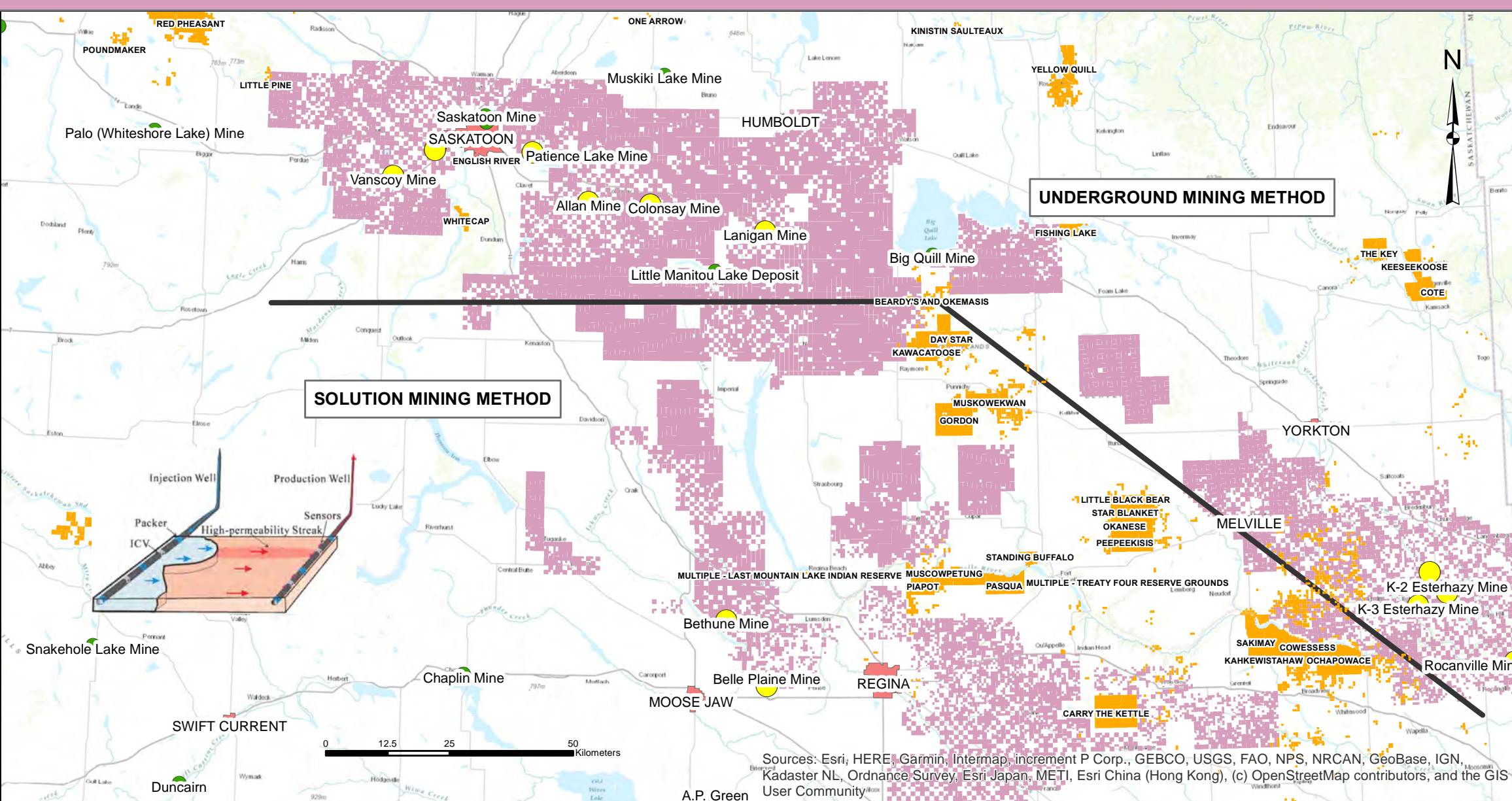
Oil Well Pump

## POTASH EXPLORATION

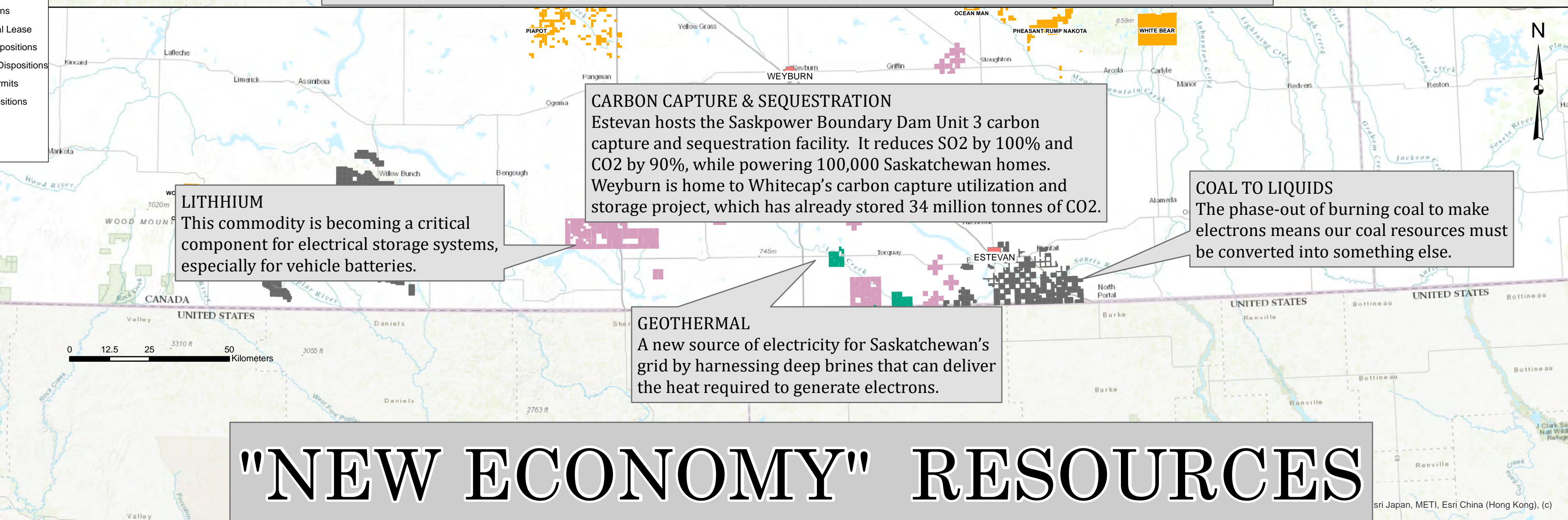


Saskatchewan is a global leader in potash production because of its immense resource - some 76.3 to 125.5 billion tonnes of potash (KCI) based on figures provided by the Saskatchewan Ministry of Energy and Resources. Of this vast resource, only 7% may be suitable for conventional underground mining, however solution mining can recover the remaining 93%. New technology called selective solution mining offers the possibility allowing for potash extraction while minimizing the need for fresh water, significantly reducing the generation of waste salt, and decreasing the surface footprint of a mine.

## POTASH PRODUCTION IN SASKATCHEWAN



## What are the New Economy Resources for Saskatchewan?



## "NEW ECONOMY" RESOURCES