Lorado Mill Reclamation Update

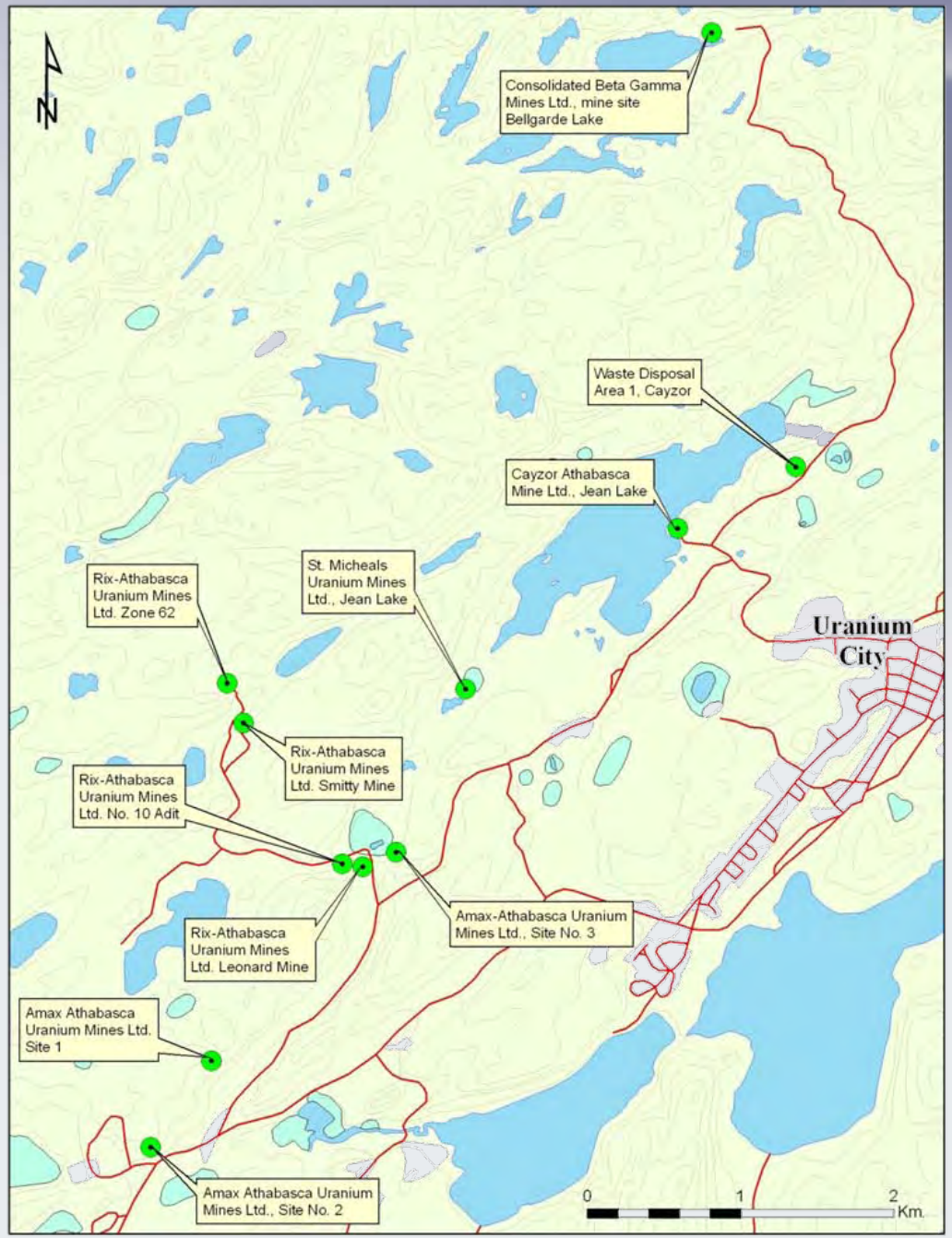
A contract to complete the Environmental Impact Study required to proceed with the reclamation of the CNSC licensed, Lorado Mill Site has recently been awarded to

Golder Associates

Field investigations are planned to get underway in October 2010

The primary issue at the Lorado site is the presence of exposed and unconfined tailings which present a gamma radiation concern. Mill tailings on the ground surface are subject to wind dispersion. In addition, the tailings generate acid and leach metals into the surrounding ground and water.

Satellite Mine Site Remediation Update

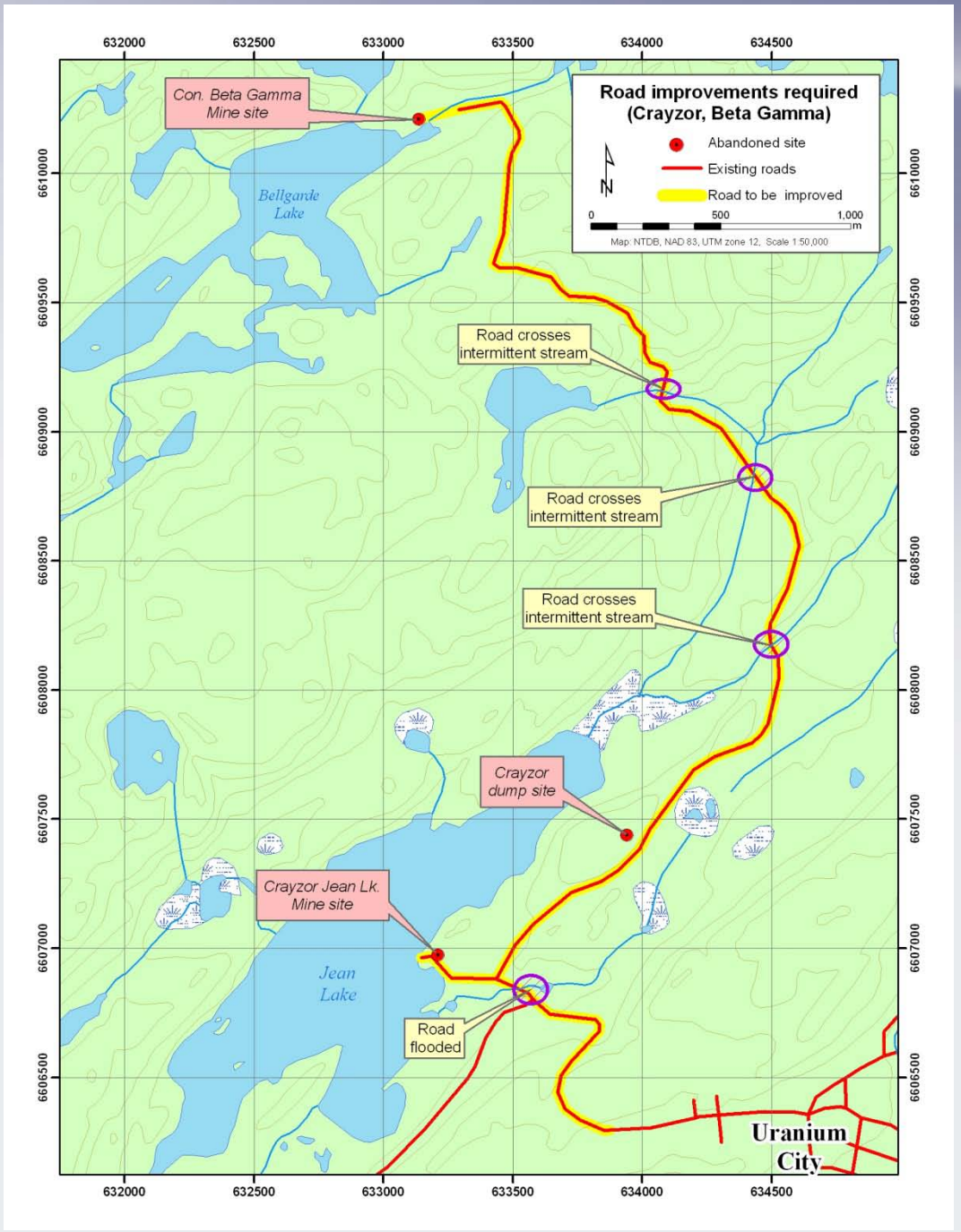


smart science solutions

Project CLEANS Satellite site Remediation Summer 2010

SRC put out tenders for the remediation of satellite sites in the spring of 2010.
Two contractors were selected to do this work:

- **Uranium City Contracting, Uranium City: 3 sites**
- **Stenne Services, Fond du Lac: 6 sites**



Two sites are located just northwest of Uranium City: Beta Gamma mine & Cayzor mine and dump site

To access these sites some road improvements were made to get equipment to the sites.

Consolidated Beta Gamma, Belgrade Lake

- Headframe collapsed over open shaft
- separate steel from lumber
- bury steel, burn lumber
- design, and fabricate shaft cap

Removing debris to expose

Shaft backfilled with waste rock

Waste rock pile
steel debris
flatten slopes and bury steel in pile

Open adit
Backfill with local waste rock
Gamma survey mine site area

Open adit to underground at Beta Gamma

Adit backfilled with waste rock

Cayzor mine and dump Jean Lake

Head frame shaft area, expose and assess original concrete shaft cap

Cayzor Athabaska Mines Ltd., on Jean Lake, northwest of Uranium City.

Cayzor Athabaska Mines Ltd., on Jean Lake, northwest of Uranium City.

Concrete foundations
break up and/or bury

Steel debris
collect and bury on
site in waste rock

Breaking down concrete footings

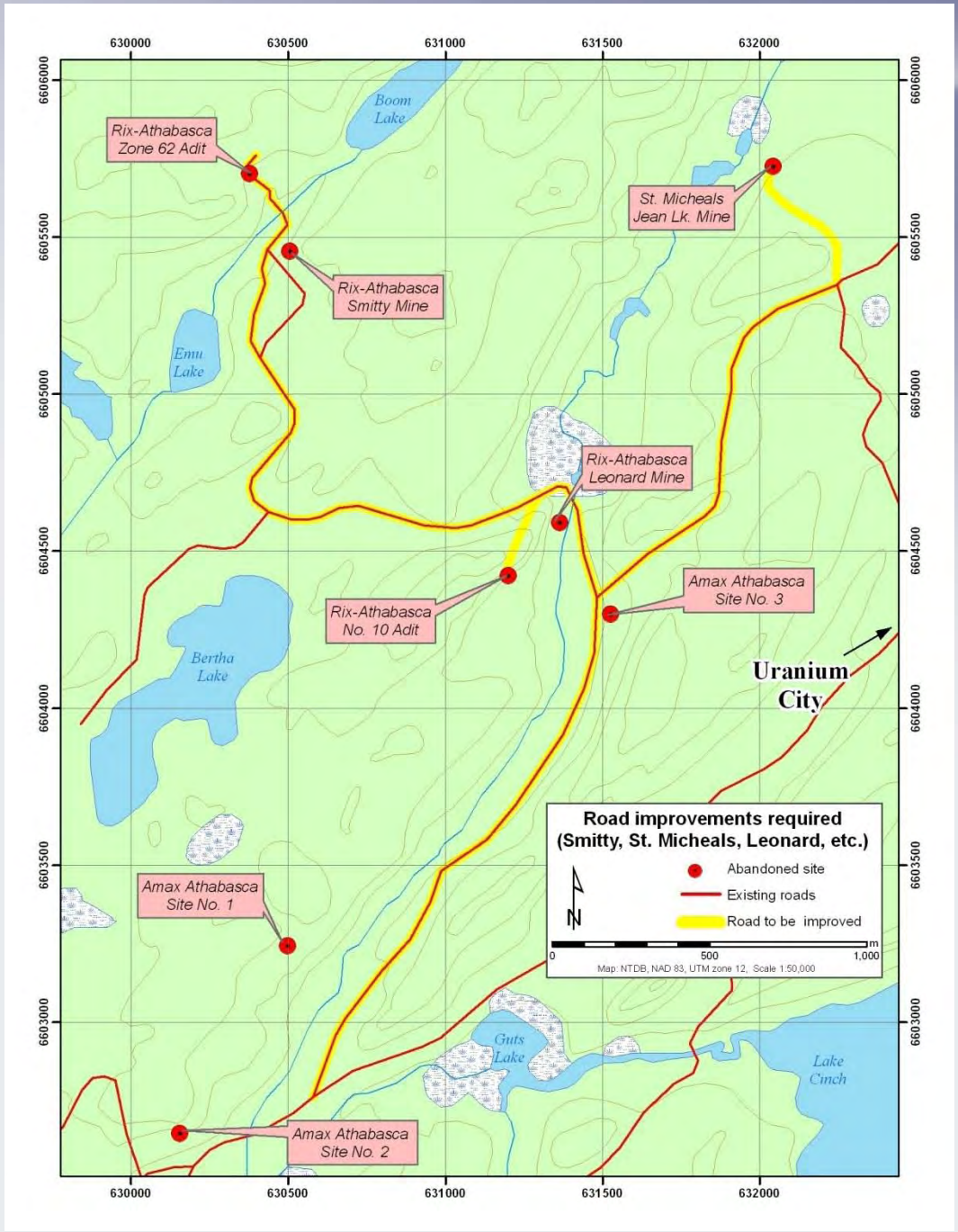
Preparing steel debris for burial

Crayzor dump site

steel debris, tires, 45 gal. drums, lead from batteries, bury steel in Crayzor waste rock remove batteries to waste storage site at Lorado Gamma survey of site

Collecting metal debris for burial

After debris burial slash was placed over soil to help revegetation

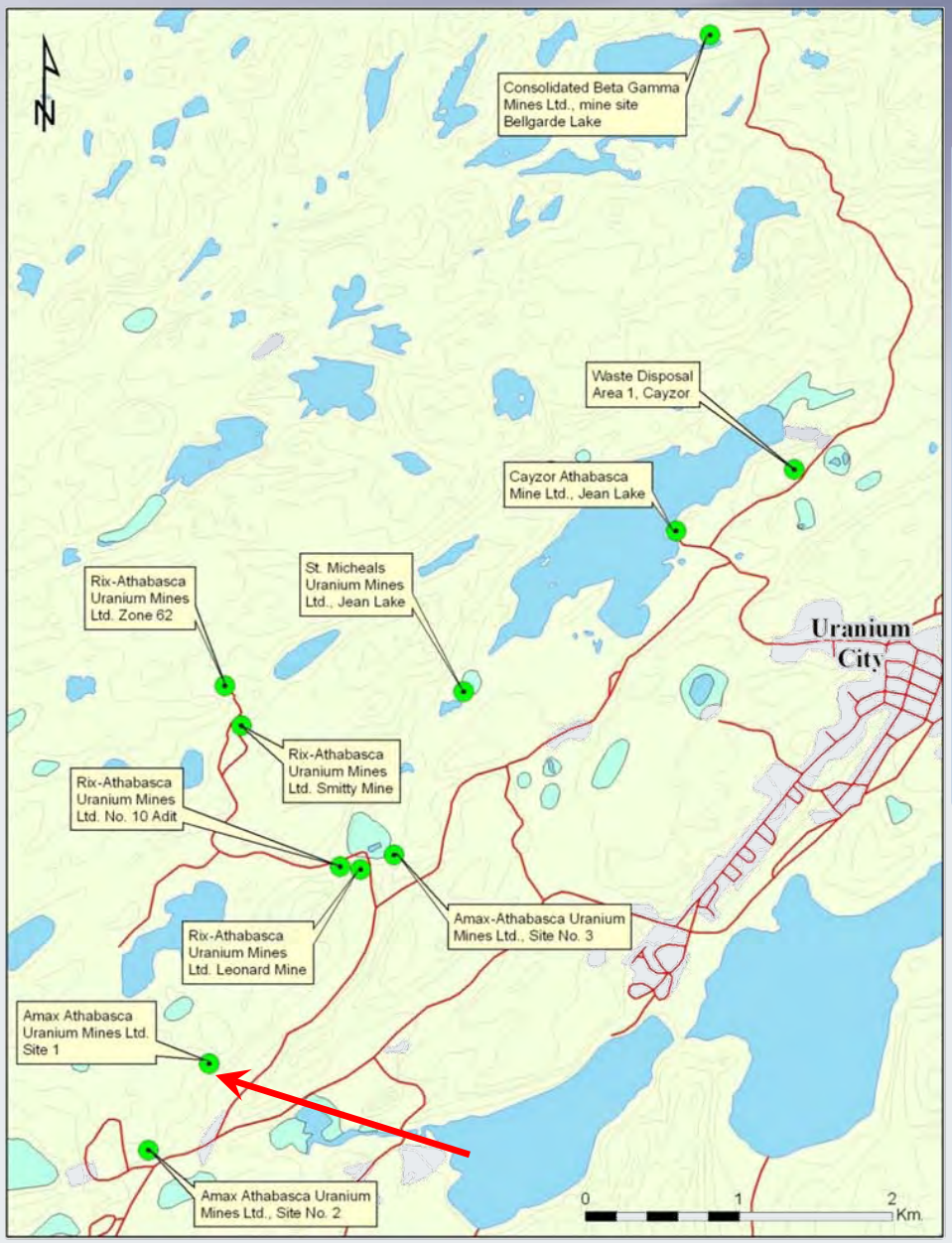


Remediation is also planned for eight other sites located just west of Uranium City along Rix road.

Four of the sites will require road improvements where beaver activity has resulted in the flooding of the original access road (near Leonard mine).

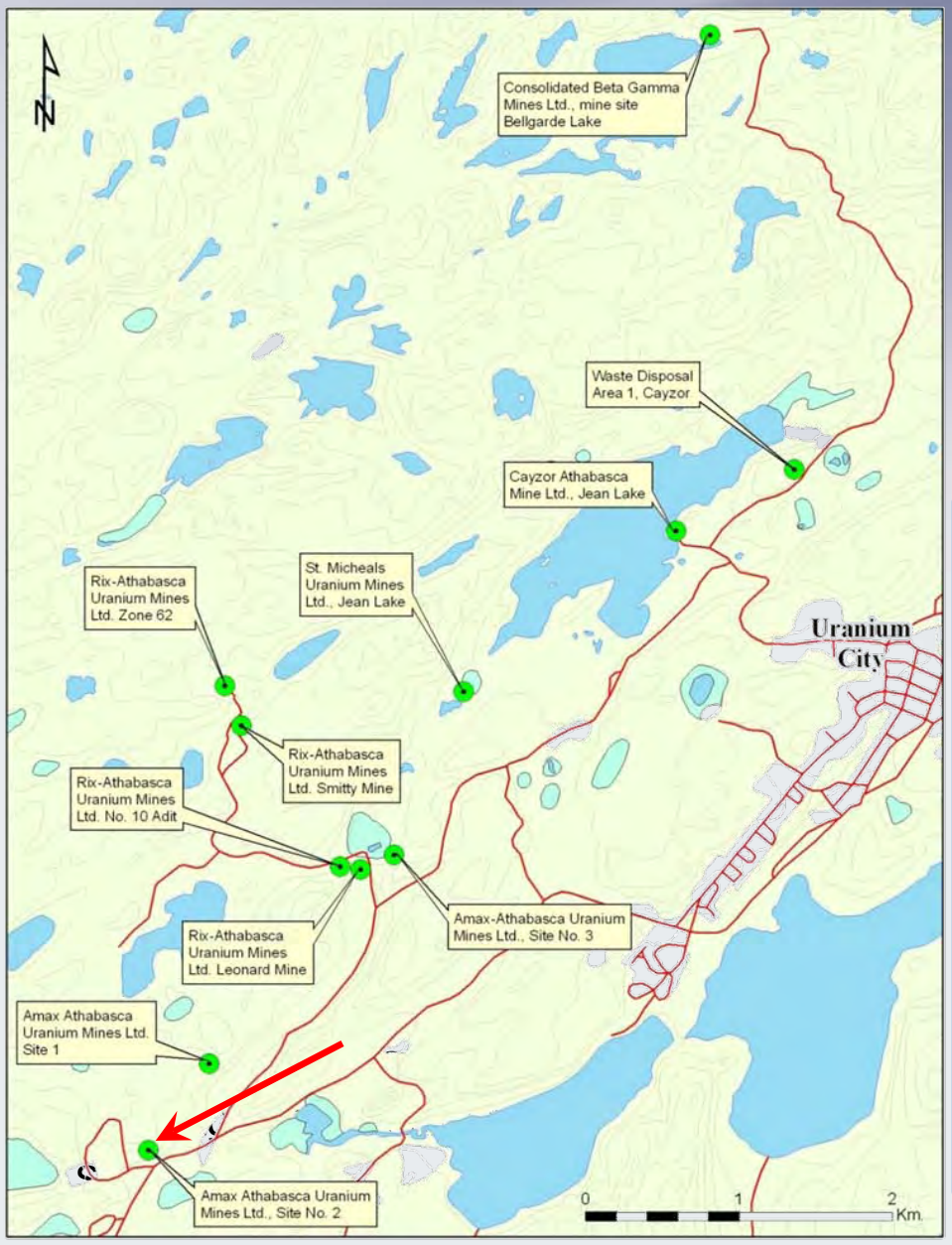
Access to St. Michaels, and the Amax-Athabasca sites will require road clearing only.

Rix Athabasca Site #1



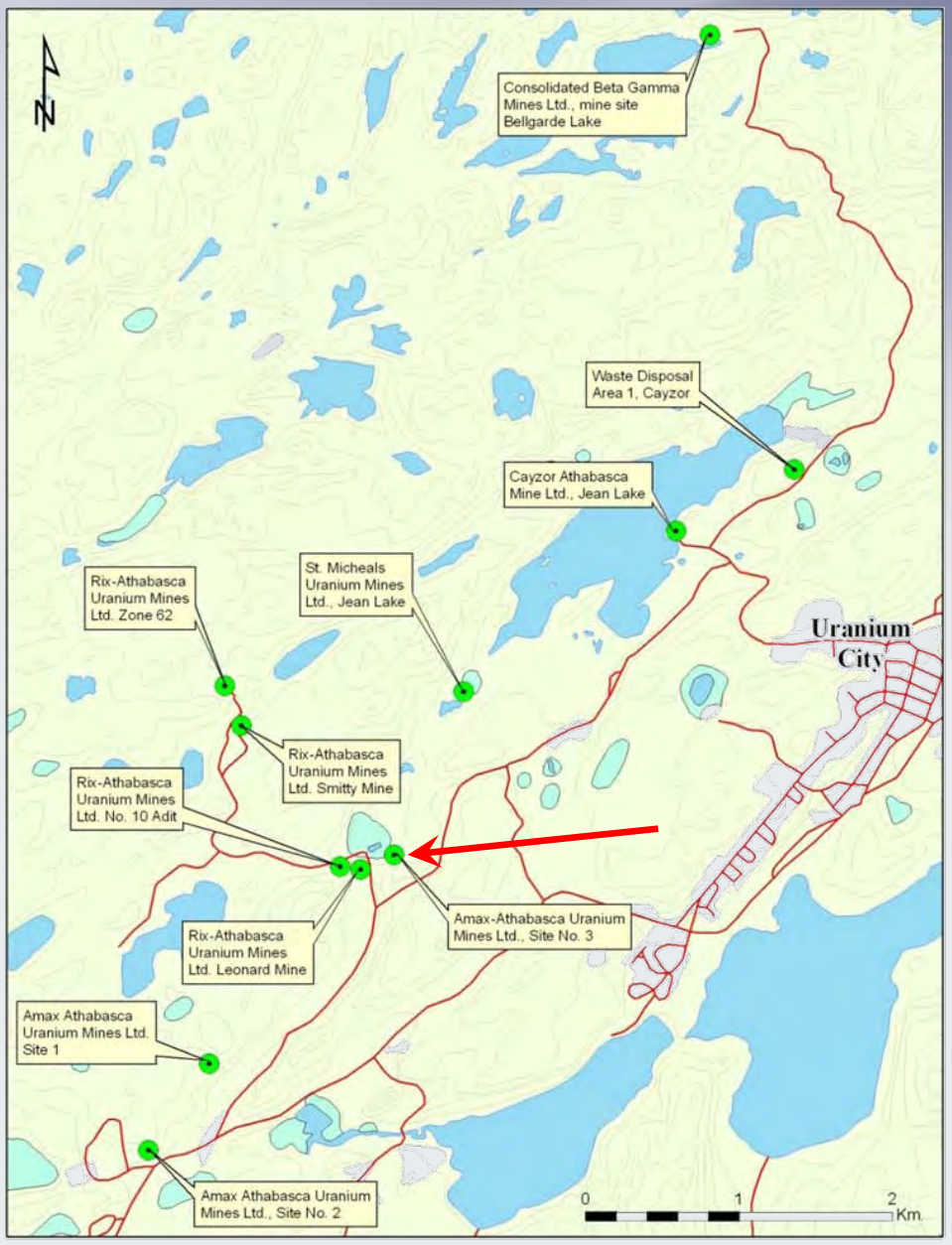
- Adit backfilled at closure, may require repacking
- Steel debris (pipe, drill rod, rails) will be collected and taken to a nearby waste rock site for burial if onsite disposal is not possible
- Gamma survey of site

Amax Athabasca Site #2



- Scattered metal debris, 45 gal. drums, drill rods etc. collect and bury at NL Eagle
- No underground workings
- Gamma survey

Amax Athabasca Site #3



- Scattered metal debris, drums, drill rods, rails etc. collect and bury in nearby waste rock pile
- No underground workings
- Some concrete building foundations to break up
- Gamma survey

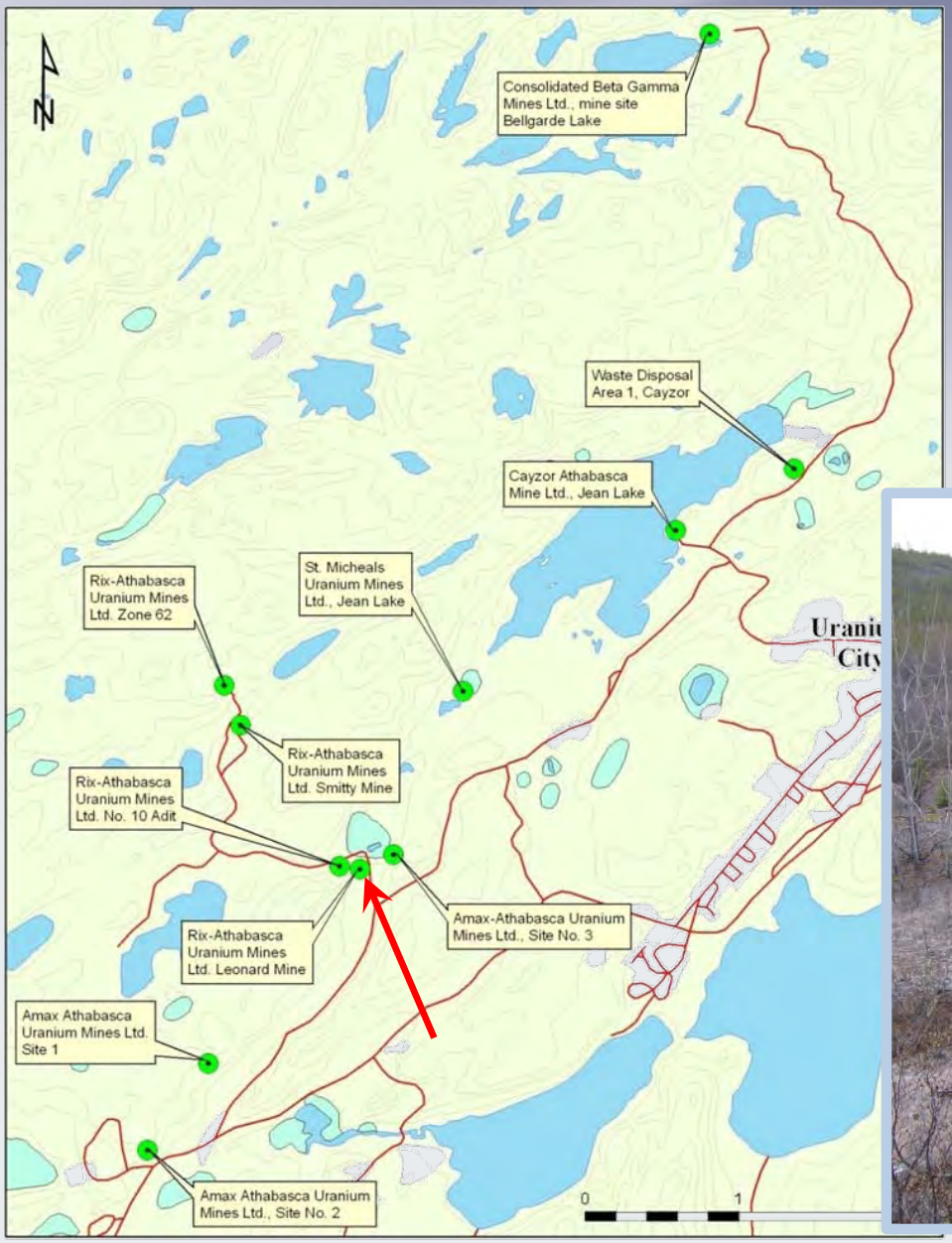
St. Michaels mine, Jean Lake

Some steel waste to be collected and buried in waste rock on site

Partially vegetated waste rock pile with scrap steel pipes and other mining steel debris to be collected and buried

Collapsed buildings debris: lumber to be separated from other waste and stockpiled for later burn

Rix-Athabasca Leonard mine



- Break up concrete slabs,
- Backfill adit
- Bury steel & concrete in waste rock on site.
- Gamma survey

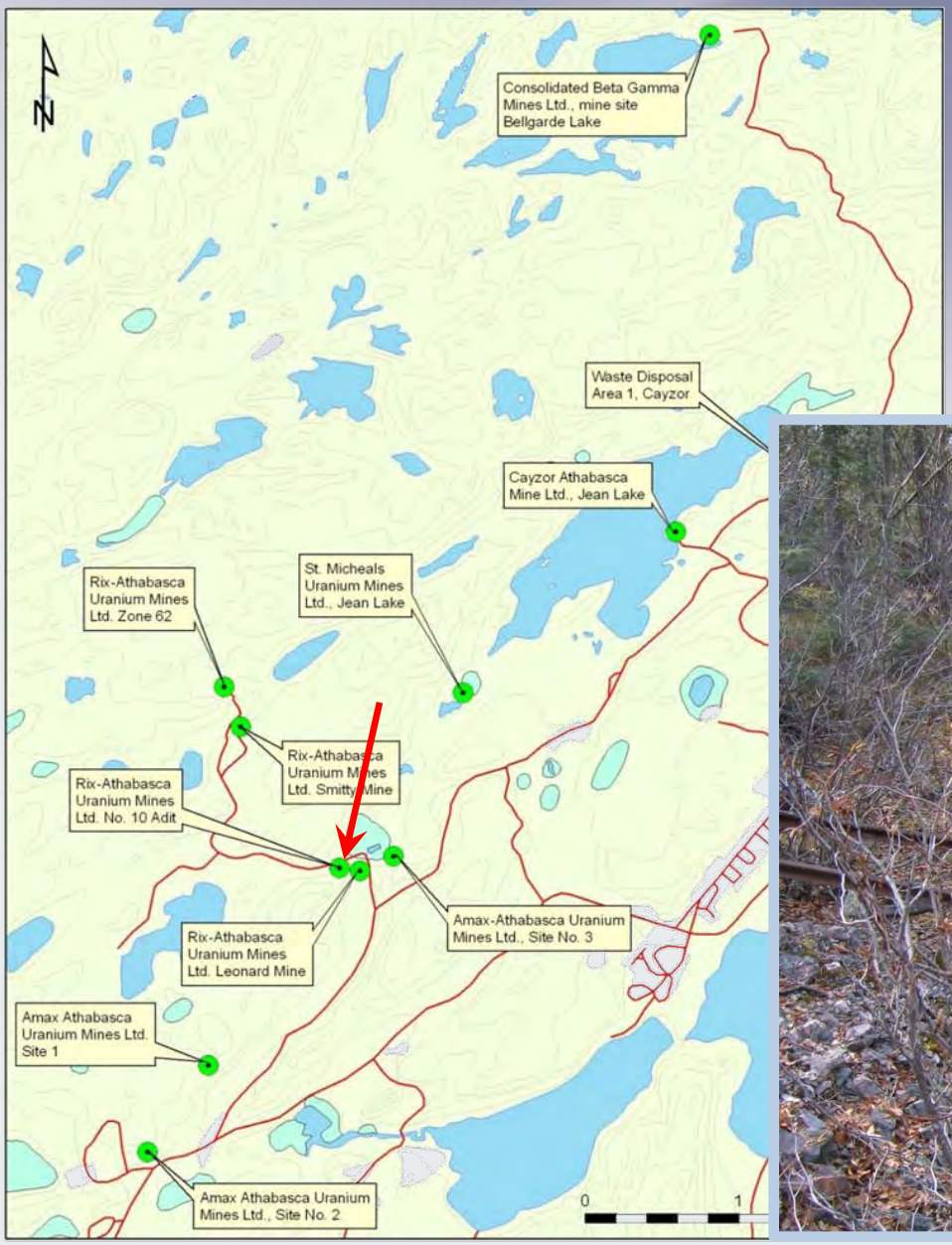
Adit showing signs of slumping, reopen and place backfill into adit as well as in front

Large poorly covered raise at Leonard site, assess for alternative closure options
Gamma survey mine area

Waste rock cleared away from ice filled adit

Temporary gate placed over opening to allow ice to melt before rock backfill

Rix-Athabasca Adit #10

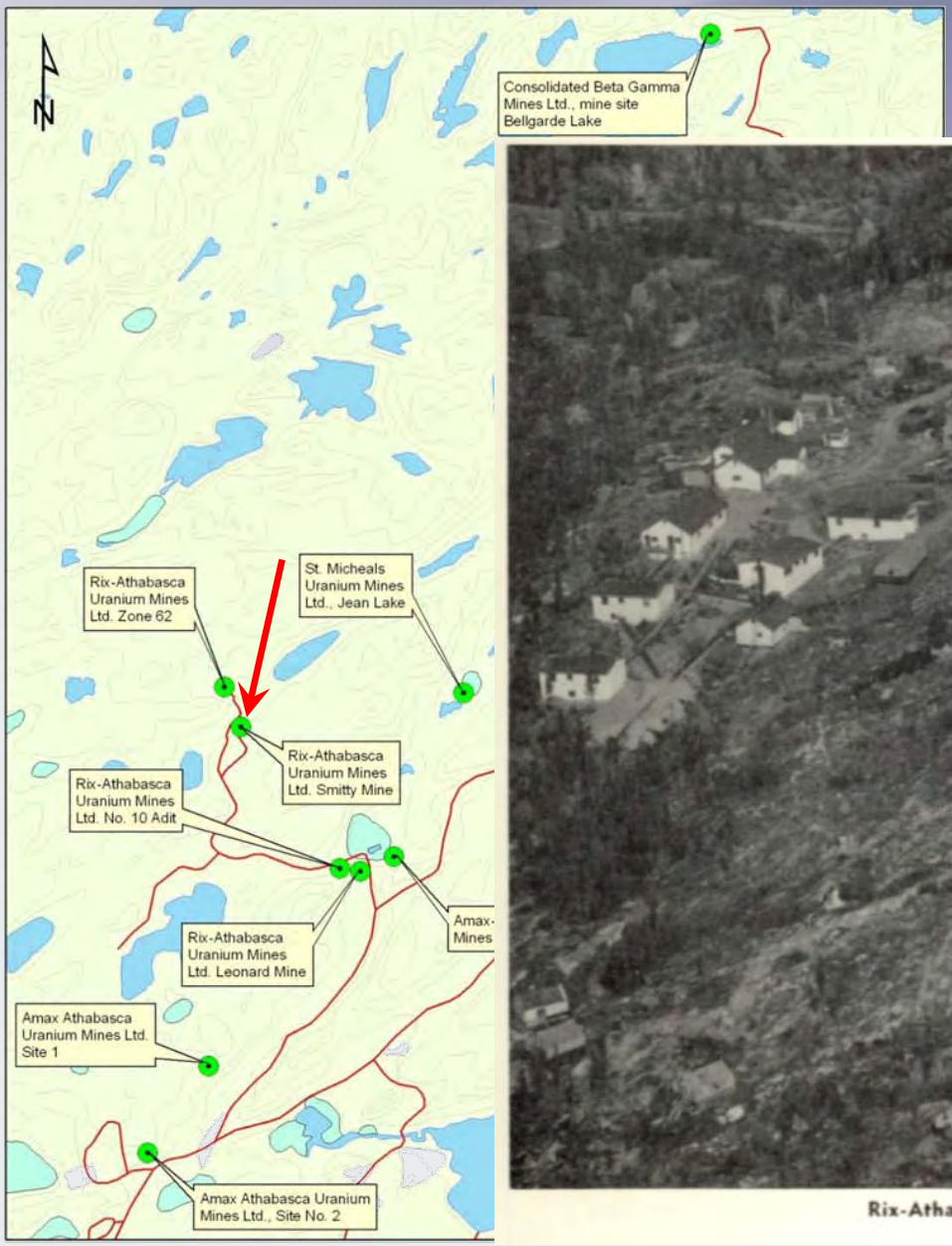


- Collect steel and other debris found on site,
- Bury steel in waste rock
- Backfill adit with local waste rock
- Gamma survey

Adit 10 exposed and measured

Backfilled adit blocked with waste rock,

Rix-Athabasca Smitty Mine site



Rix-Athabasca Uranium Mines Ltd., west of Uranium City.

Large steel tank and steel debris scattered all over the Smitty site will be collected and buried in waste rock on site

Open raise requires proper cover or plug to prevent entry
There are at least 3 similar openings on site that must be sealed
Complete gamma survey of mine site

Concrete building foundations to be broken up and covered with waste rock

Steel boiler with asbestos wrapped pipes, asbestos to be removed, contained and taken to the SRC fenced temoprary waste storage site at Lorado until final disposal

Breaking up concrete foundations

Broken concrete moved to on site disposal area for burial with waste rock

Large volume of steel debris collected at Smitty site

Concrete and steel being placed for burial with waste rock

Raise covered with wire mesh exposed, to be backfilled or covered with stainless steel cap

Previously unknown open raise discovered during course of remediation, plugged with polyurethane foam plug

Remediation work is currently in progress at the satellite site

The contractor should be finished in approximately 2-3 weeks (mid Sept.)

Remaining activities:

- **A gamma survey will be done at each site**
- **Burn lumber collected and piled at site**
- **Continue to monitoring for signs of slumping**
- **Do site inspections with Saskatchewan Env.**