

2.0 SCOPE OF THE NOTICE OF ALTERATION

This Notice of alteration (NOA) includes the continuing operation and decommissioning of the entire TANCO facility, including: the mine, the tantalum and spodumene milling facility, the cesium products facility, tantalum and spodumene tailings management, CPF residue management, product storage facilities, and the TANCO Mine Road.

2.1 SPATIAL BOUNDARIES

2.1.1 REGIONAL STUDY AREA

The regional study area is defined primarily by socio-economic factors and includes communities that derive economic benefits from the mine, the communities where the mine employees reside, and regional transportation routes (Figure 2.1).

2.1.2 LOCAL STUDY AREAS

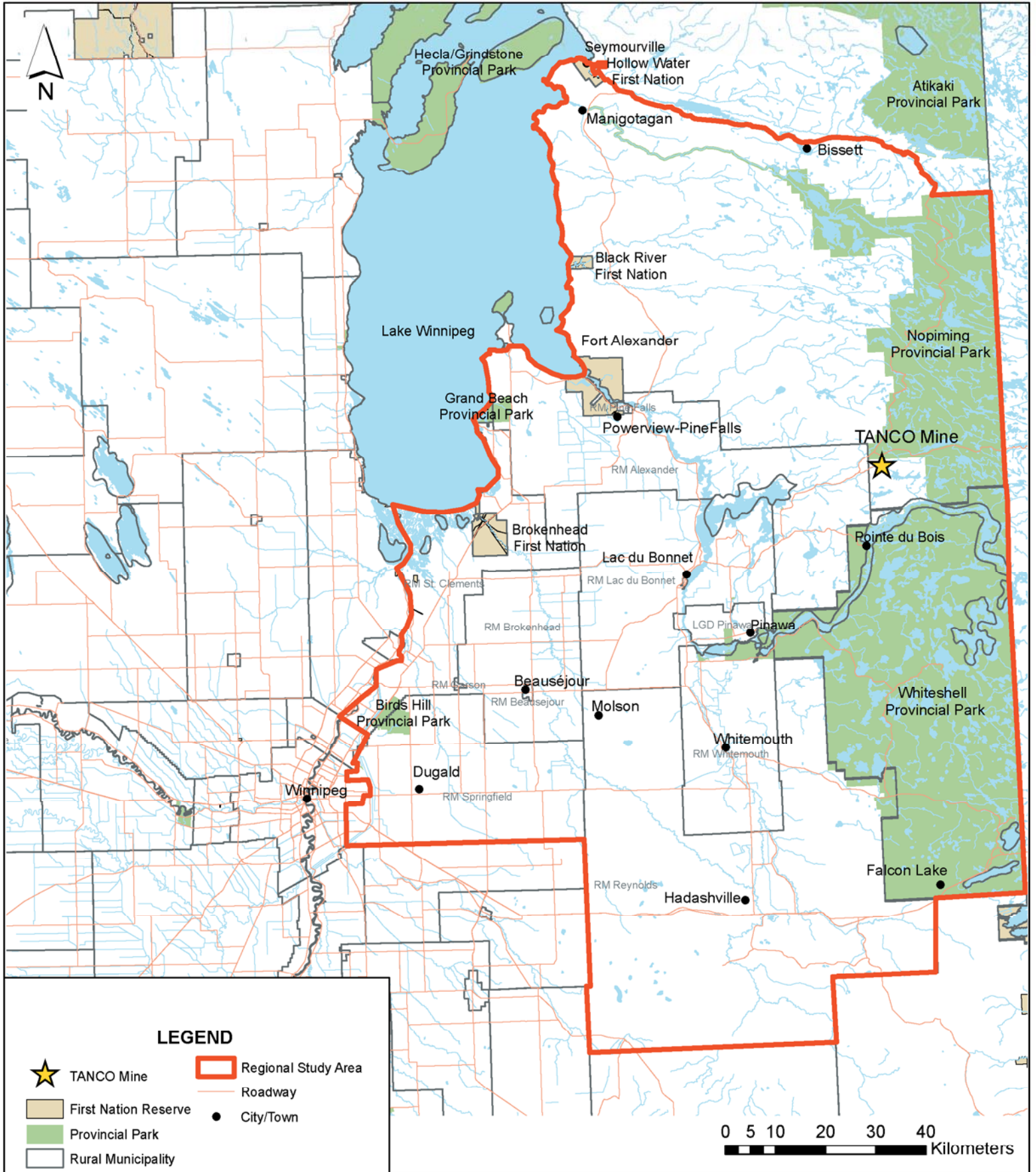
The local study area is defined by the zone of influence of the mine on surrounding land and waterbodies. The zone of influence on aquatic resources is limited to the watershed of Bernic Lake, as determined by previous studies of the geographic extent of facility effects on aquatic resources (Figure 2.2; Section 4.3). The zone of influence on other environmental components includes the Bernic Lake watershed in addition to the footprint of all mine infrastructure outside the watershed such as the TANCO mine road and the Molson loading facility. The socio-economic zone of influence includes the regional study area as described in Figure 2.1

2.1.3 PROJECT SITE

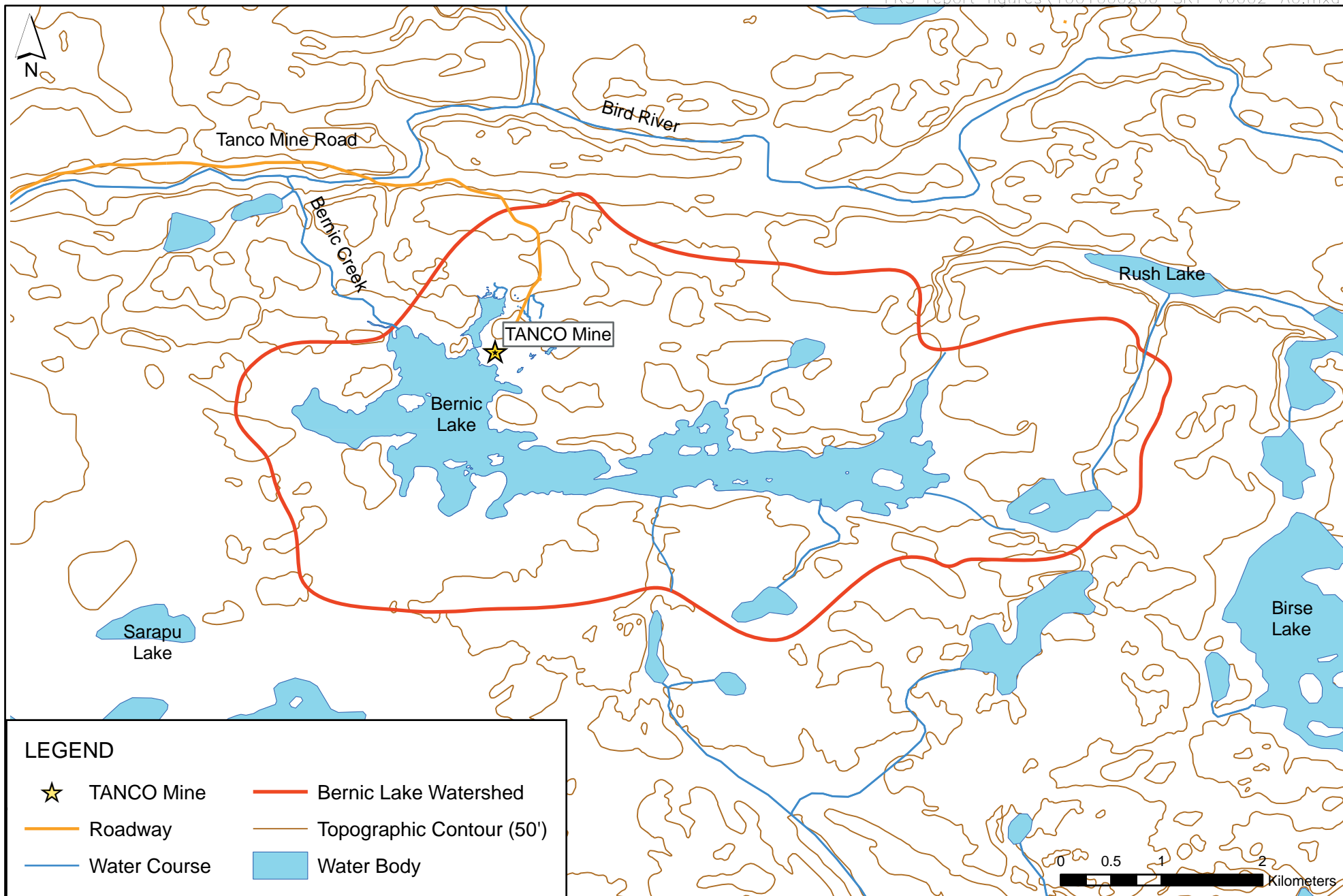
The Project Site is defined as the area that is represented by surface leases M-126 to M-130, M-145 to M-149, SL-1, SL-3 and SL-11 (Figure 2.3).

The temporal boundaries of the assessment include operation of the facility from the present to the time the surface lease is relinquished to the Province following the end of mining and successful decommissioning and reclamation. Based on current reserves, the life of mine is 7 years plus the period required for mine closure, which is estimated as being an additional 3 years following the end of mining. The life of the surface operations may be extended by up to an additional 7 years to allow for reprocessing of the cesium plant residue however this activity is not covered by this NOA. Any reprocessing of cesium plant residue requires the development of a cost-effective process for recovery of the residual cesium and rubidium. Cabot Corporation is continuing to work on development of a cost-effective process but this work has not yet

progressed to the stage of implementation such that residue reprocessing is not part of the project plan at this time. In the event that development of a commercial scale process is successful, implementation at the site would be done with an alteration to the license.



**FIGURE 2.1
 TANCO MINE
 REGIONAL STUDY AREA**



LEGEND

- ★ TANCO Mine
- Bernic Lake Watershed
- Roadway
- Topographic Contour (50')
- Water Course
- Water Body



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**FIGURE 2.2
BERNIC LAKE WATERSHED**