## Ignace Area "Potential" Sites in the Nuclear Waste Management Organization's Siting Process

## Revell Lake area / "Revell Batholith"

In 2013, the Ministry of Northern Development and Mines withdrew four blocks of land in the Ignace area from mineral exploration or development, reserving it for the Nuclear Waste Management Organization's investigation of areas the NWMO called "general potentially suitable areas" for the burial of high level nuclear waste. The four areas totalled 647 square kilometres. The NWMO investigation is now concentrated on the most western block, in the Revell Lake area.



The general area is located within the Nelson River Drainage Area, which drains into the NelsonRiver basin, and eventually into Hudson Bay in the Arctic watershed. The Revell Lake area is in the Wabigoon sub-basins, with water flowing north and west.<sup>2</sup> The region is part of the Severn Uplands, featuring the broadly rolling surfaces of Canadian Shield bedrock that occupies most of northwestern Ontario.<sup>3</sup>

NWMO describes the north-central portion of the Revell batholith – the area they are investigating - as predominantly Crown land and outside of protected areas. Access is area via an extensive network of logging roadsfrom either the Trans-Canada Highway or Highway 622. <sup>4</sup>

The area withdrawn from areas available for mineral exploration as a "general potentially suitable area" is bordered and includes portions of Pyatt Lake at its northern tip, Revell Lake at its east tip, West Hawk Lake within its southern tip. Spruce Lake is within the withdrawan area; Cox Lake and Mennin Lake are just outside western boundary line. 5 Mennin Lake is a very short distance from the drill sites.

The northwestern portion of the withdrawn area, including the area where the NWMO is currently drilling as part of their investigation, is in the Bending Lake General Use Area (G2544)<sup>6</sup>. The Bending Lake General Use Area (62544) includes the Townships of Revell, Hyndman and parts of Hodgson, Bradshaw and Osaquan. The general use area includes two tourist lodges, six outpost camps, one private recreation camp, three remote cottages and a number of private cottages within the area. Canada Land Inventory surveys indicate that this area contains some Class 2-4 agricultural land. Presently none of this land is under agricultural production. Bending Lake Highway 622 traverses south from Highway 17 along the western edge of Fisheries Management Zone #21 (Ignace District Fisheries Management Plan) and the G2544 Bending Lake General Use Area.

The northwestern quarter of this block is less than half km from Pyatt Lake Conservation Reserve and less than two kilometeres from the Adair Lake Conservation Reserve. This "general potentially suitable area" is in the Wabigoon Forest. The candidate area identified for further study in the Revell batholith is in the NWMO's Phase 2 Geoscientific Preliminary Assessment is located in the northern portion of the Revell Lake withdrawn area.<sup>7</sup>

<sup>3</sup> November 2013 PHASE 1 DESKTOP ASSESSMENT Environment Report Township of Ignace, Ontario REPORT Report No: NWMO Report No: 12-1152-0026 (4001) APM-REP-06144-0010

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<sup>&</sup>lt;sup>1</sup> NWMO: Preliminary Assessment for Siting a Deep Geological Repository for Canada's Used Nuclear Fuel, The Corporation of the Township of Ignace, Ontario – FINDINGS FROM PHASE ONE STUDIES, APM-REP-06144-0009 NOVEMBER 2013

<sup>&</sup>lt;sup>2</sup> Ibid, Page 61

<sup>&</sup>lt;sup>4</sup> FINDINGS FROM PHASE ONE STUDIES, APM-REP-06144-0009 NOVEMBER 2013 Pages 40-41

<sup>&</sup>lt;sup>6</sup> Crown Land Use Atlas Policy for General Use Area G2544

<sup>&</sup>lt;sup>7</sup>Phase 2 Geoscientific Preliminary Assessment FINDINGS FROM INITIAL FIELD STUDIES THE TOWNSHIP OF IGNACE, ONTARIO, NWMO Report: APM-REP-06145-0001, February 2015, Page 24