

## Jackfish Facility General Information

May 2020

### General

Yellowknife is located on the west shore of Yellowknife Bay on the north arm of Great Slave Lake (Figure 1). The Jackfish Lake Generating Facility (the Jackfish Facility) is located at the north end of Yellowknife on the north shore of Jackfish Lake (formerly known as Stock Lake) and is surrounded by chain-link fencing (Figure 2).

The arrangement of buildings from east to west along the south side of the property is as follows: the office building, Cat Plant, EMD Plant, K-Plant (the three plants are joined by covered walkways), the warehouse, and the line shop. There is a water pump house located south of the K-Plant, a fuel pump house north of the K-Plant, and a storage shed northeast of the line shop. On the north side of the property from east to west sits the substation, the Ruston Plant, a drum storage berm, the tank farm, and five modular gen-sets with a fuel storage tank and control building (Figure 3).

The K-plant built in 1969 and extended in 1988 contains two Mirrlees KV-16 gen-sets rated at 5000 kilowatts (kW) each; only one is in service at this time. The EMD Plant (Photo 1) built in 1974 and extended in 1988 contains four EMD's (Electro-Motive Division of GM); two E-series gen-sets rated at 2500 kW each and two F-series gen-sets rated at 2850 kW each. The Cat plant built in 1993 contains two Caterpillar 3612 gen-sets rated at 2700 kW.

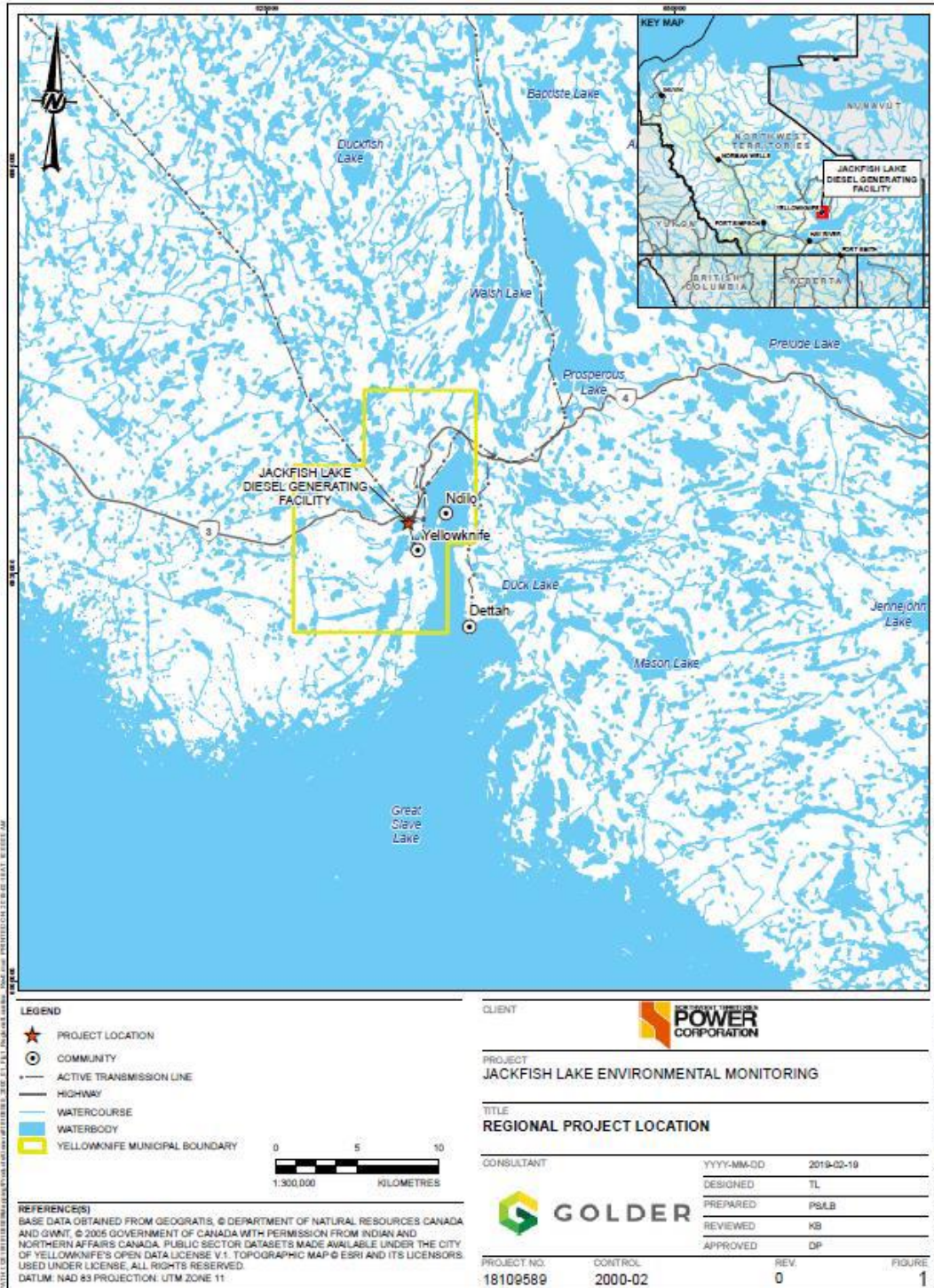
### Water Licences:

- MV2019L1-00011- Jackfish Power Generating Facility- Type A Water Licence.  
Expiry: 17/10/2044
  - Aquatic Effects Monitoring Plan is being developed that will apply under licence.

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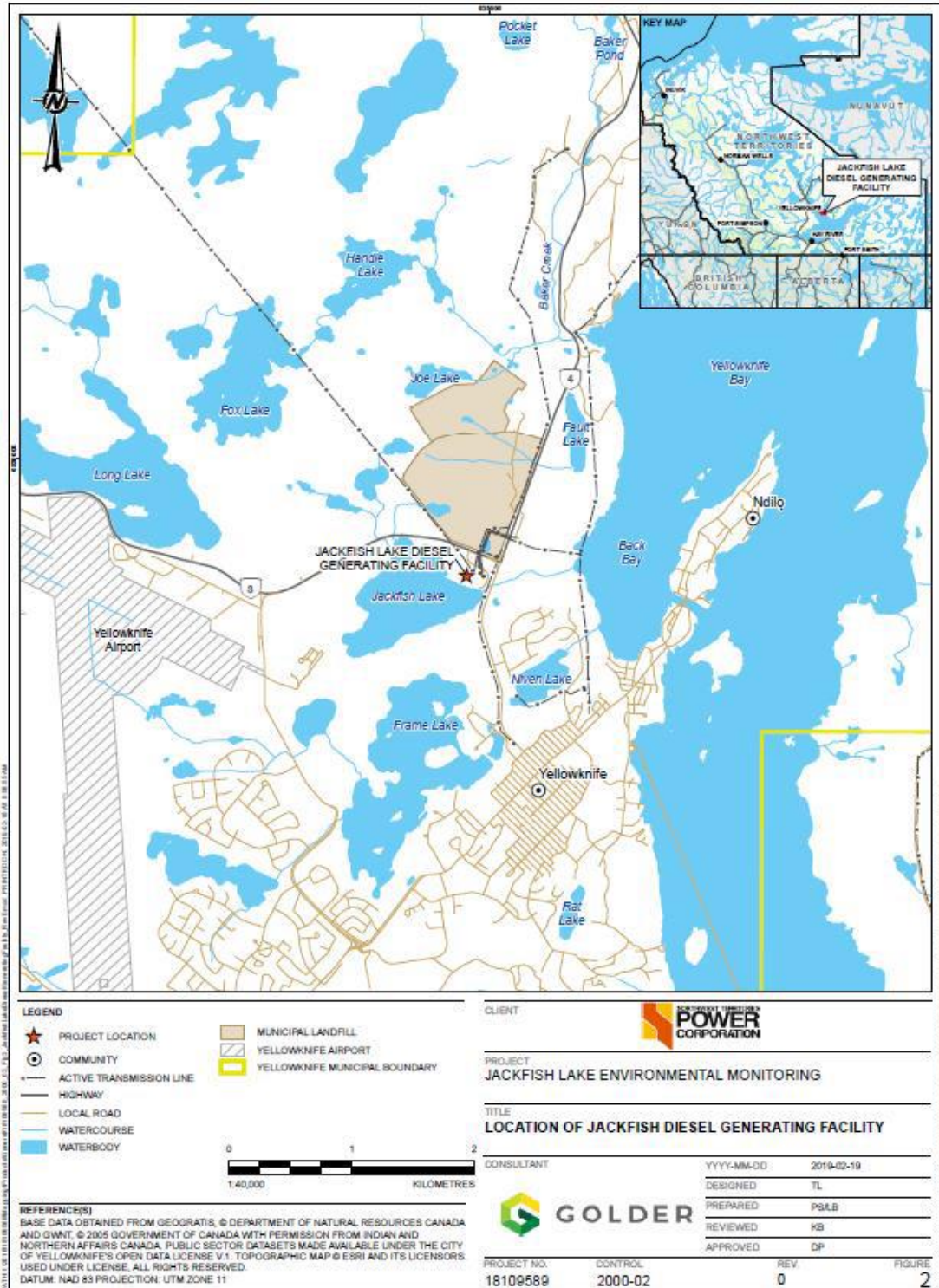
**Figure 1: Regional Project Location**



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**Figure 2. Location of Jackfish Diesel Generating Facility**



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Figure 3: Jackfish Lake Generating Station Overview



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**Figure 4: Jackfish Lake Generating Station Aerial**

