

CO<sub>2</sub> is generally in a supercritical state over the entire Baldonnel-Pardonet map area. The pressure is greater than 7,500 kPa, the temperature exceeds 31°C and the TVD is greater than 800m.

Boundary Lake-Osprey Aquifer  
Effective CO<sub>2</sub> Storage Potential  
(% of Theoretical CO<sub>2</sub> Storage Potential)  
P10 (0.5%) 3.4 Mt; P50 (2.0%) 13.6 Mt; P90 (5.4%) 36.8 Mt

Monias-Beg Aquifer  
Effective CO<sub>2</sub> Storage Potential  
(% of Theoretical CO<sub>2</sub> Storage Potential)  
P10 (0.5%) 9.2 Mt; P50 (2.0%) 36.7 Mt; P90 (5.4%) 99.0 Mt

Parkland-Stoddart Aquifer  
Effective CO<sub>2</sub> Storage Potential  
(% of Theoretical CO<sub>2</sub> Storage Potential)  
P10 (0.5%) 15.6 Mt; P50 (2.0%) 62.3 Mt; P90 (5.4%) 168.2 Mt

Dawson Aquifer  
Effective CO<sub>2</sub> Storage Potential  
(% of Theoretical CO<sub>2</sub> Storage Potential)  
P10 (0.5%) 17.9 Mt; P50 (2.0%) 71.6 Mt; P90 (5.4%) 193.4 Mt

These pools west of the deformation front have been included in the evaluation due to their storage potential and proximity to the Prince George area. It must be stressed that these areas need to be evaluated independently, because while they may be favourable for carbon storage based on lithology, their proximity to the deformation front may result in structural complexity and significant risk to containment.

CO<sub>2</sub> Storage Pool Candidates\*

CO<sub>2</sub> Phase

- Gas
- Supercritical

Effective CO<sub>2</sub> Storage Potential (Mt)

- 0.0 - 1.0
- 1.1 - 2.5
- 2.6 - 5.0
- 5.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- 50.1 - 64.1

Commingled Pool Candidates

CO<sub>2</sub> Storage Pool Non-Candidates

Boundary Lake-Osprey Aquifer

- Supercritical

Dawson Aquifer

- Supercritical

Monias-Beg Aquifer

- Supercritical

Parkland-Stoddart Aquifer

- Supercritical

\*Pool storage candidates are depleted or nearly depleted pools whose TVDs are greater than 800m and/or are east of the Mesozoic deformation front.

NEBC Geological Carbon Capture and Storage Atlas



Baldonnel Aquifer and Baldonnel-Pardonet Pool Candidates Effective CO<sub>2</sub> Storage Potential

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Figure

Author: A. Gibbs, J.Xie

Project: GBCS

Cartographer: C. Keeler

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Geology

- Pardonet Erosional Edge (WCSB Atlas, 1994)
- Baldonnel Subcrop Edge (PRCL, 2021)

Mesozoic Deformation Front

0 5 10 20 30 40 50 Km

Projection: UTM Zone 10; Central Meridian -123; NAD 1983

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