

Water Use calculations.

Water availability is determined using “Methods for Determining Available Winter Water Volumes for Small-Scale Projects. April 2020”.

There are five lakes that will be used 12 months per year. Four of the lakes are to be used only during ice-free portions of the year (greyed-out on the table below). The surface area was measured using Government of Canada GIS data. Depths are estimated using boat access and are approximate except for the greyed-out lakes which were estimated from field visits.

Lake	Surface Area (M2)	Est. Ave Depth	Total Available (M3) (0.1xSA)	Daily Available (M3) TA/350)
Discovery Lake	465,600	>3	46,560	133
Sito Lake	2,368,000	>3	236,800	677
Quayta Lake	7,974,000	>3	797,400	2,278
Bluefish Lake	2,796,000	>3	279,600	799
Prosperous Lake	30,910,000	>3	3,091,000	8,831
Lake A (T-Bone)	1,036,000	>2	103,600	296
Lake B (Bone)	790,300	>2	79,030	226
Lake C (5656)	86,990	>2	8,699	25
Lake D (SZ)	195,500	>2	19,550	56

Water Source	Capacity of Water Source	Other Users of the Water Source	Comparison of Total Proposed Water Use to Available Capacity*
Discovery Lake	46,560	None	0.215%
Sito Lake	236,800	None	0.042%
Quayta Lake	797,400	Cabin Users	0.013%
Bluefish Lake	279,600	NTPC	0.036%
Prosperous Lake	3,091,000	NTPC Cabin Users	0.003%
Lake A (T-Bone)	103,600	None	0.003%
Lake B (Bone)	79,030	None	0.004%
Lake C (5656)	8,699	None	0.034%
Lake D (SZ)	19,550	None	0.015%

- = maximum daily use/Total Available Capacity (0.1m x Surface Area)