

Available Water Calculations and Water Budget

POD#	NTS Location	Name	Area (Ha)	Area (m2)	Total Available Water Use	Northing (Nad 83)	Eastings (Nad 83)	Class	Width	Depth (m)*	Gradient (%)	Flow (m3/s)	Total Requested Volume (m <sup>3</sup> )
281	H-29	Muskeg River				6685456	482481	S1	61	2	4.76		20,000
282	D-21	Unnamed Lake	22.5	225,000	22,500	6707699	480995			3			7,000
283	O-06	Unnamed Lake	127.6	1,276,000	127,600	6699285	499396			3			26,300
284	E-72	Rabbit Creek				6709579	486675	S2	20	0.5	0.20	0.001	99
285	O-42	Netla River				6710352	492230	S3	4	0.5	0.27		99
286	N-47	Unnamed Lake	28.6	286,000	28,600	6719990	505712			3			12,000
287	F-31	Unnamed Lake	10.2	102,000	10,200	6726422	507332			2			99
288	B-49	Unnamed Lake	9.7	96,600	9,660	6740932	519867			2			99
	B-66	Liard River				6679601	475177					240	65,000
												<b>TOTAL</b>	<b>130,696</b>

\*\*10% of instantaneous flow rate (historically)

\* DFO Protocol Waterbodies with max depth of 1m or less have no limit of water use (expected to freeze to bottom).

Waterbodies must have at least 1.5m of water under ice (1m of ice expected in Dehcho) to be used as a water source if more than 100m<sup>3</sup> is to be extracted during the season

MVLWB April 2020 Method for Determining Available Winter Water Volumes for Small-Scale Projects requires a minimum waterbody depth of 3m in the Dehcho.

\*\* Muskeg River : Requires measuring profile/depths to calculate a cross sectional area at the withdrawal point and a flow probe to measure flow rate of water - preferably at a few points  
instantaneous flow volume may be calculated as average flow rate (m/s) multiplied by cross-sectional area (m<sup>2</sup>)