

Stations	Different models	Calibration			Validation		
		NSE	R^2	RE (%)	NSE	R^2	RE (%)
Athabasca River at Old Fort	Original SWAT model	0.48	0.62	15.9	0.68	0.71	11.8
	Hydroclimatological model	0.68	0.68	1.5	0.81	0.87	-15.7
	Equilibrium temperature model	0.67	0.74	14.6	0.70	0.75	-0.8
Muskeg River near Fort Mackay	Original SWAT model	0.60	0.69	11.1	0.54	0.67	16.8
	Hydroclimatological model	0.36	0.46	18.3	-0.03	0.30	47.0
	Equilibrium temperature model	0.81	0.85	12.0	0.80	0.86	18.8
Athabasca River near Horse River	Original SWAT model	0.52	0.62	-14.0	0.50	0.60	-4.8
	Hydroclimatological model	0.6	0.61	-4.1	0.41	0.46	-0.3
	Equilibrium temperature model	0.86	0.86	-0.9	0.74	0.76	7.8
Athabasca River at Athabasca	Original SWAT model	0.87	0.68	2.8	0.53	0.68	-3.5
	Hydroclimatological model	0.81	0.82	-11.9	0.8	0.83	-15.8
	Equilibrium temperature model	0.86	0.86	-3.3	0.80	0.81	-2.3
Athabasca River near Windfall	Original SWAT model	0.09	0.68	-6.6	/	/	/
	Hydroclimatological model	0.03	0.47	46.9	/	/	/
	Equilibrium temperature model	0.74	0.77	-17.2	/	/	/
Average	Original SWAT model	0.51	0.66	10.1	0.56	0.67	8.4
	Hydroclimatological model	0.50	0.61	16.5	0.50	0.62	19.7
	Equilibrium temperature model	0.79	0.82	9.6	0.76	0.80	7.4