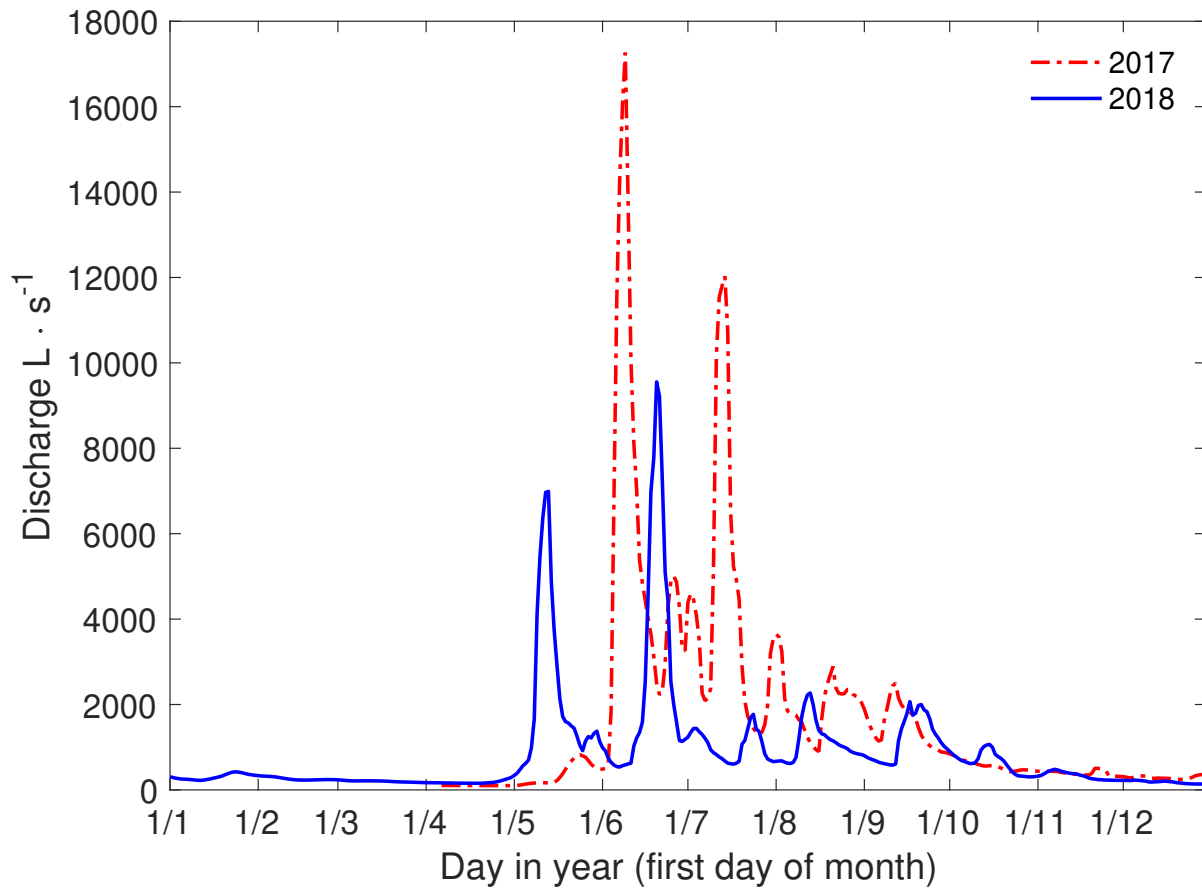


## Supplementary material

**Table S1.** Summary of all samplings of Lake 850

Site Description	Coordinates	Max Depth	Sampling Depth	Sampling Date	Sample Type	Sample number
Inlet 1	N 68°17'50.6" E19°7'6.9"	5 cm		26/Jun/18 03/Jun/19	water, Q	n=2
Inlet 2	N 68°17'53.5" E19°7'8.3"	6 cm		13/Jul/19 22/Aug/19 20/Sept/19	water, Q	n=3
Outlet	N 68°17'54.8" E19°7'26.3"	10 cm		26/Jun/18 03/Jun/19 13/Jul/19 22/Aug/19 20/Sept/19	water, Q	n=5
Lake water	N 68°17'51.3" E19°7'10.3"		surface	03/Jun/19	water	n=1
Water profile	N 68°17'53.5" E19°7'15.6"	4.2-7.5 m	1 m to 7 m	22/Mar/19 22/Aug/19 20/Sept/19	water	n=14
Rn sampling 100	N 68°17'53.1" E19°7'20.4"	0.75 m	0.5 m	22/Aug/19	water	n=1
Rn sampling 101	N 68°17'53.5" E19°7'16.9"	7.5 m	1.5-4 m	22/Aug/19	water	n=2
Rn sampling 102	N 68°17'54.2" E19°7'18.7"	4 m	1.5 m	22/Aug/19	water	n=1
Rn sampling 103	N 68°17'51.5" E19°7'11.7"	2 m	1.5 m	22/Aug/19	water	n=1
Rn sampling 104	N 68°17'53.3" E19°7'11.9"	5 m	1.5 m	22/Aug/19	water	n=1
Rn sampling 20	N 68°17'54.4" E19°7'21.4"	0.9 m	0.5 m	20/Sept/19	water	n=1
Rn sampling 21	N 68°17'54.8" E19°7'18.2"	5.4 m	1.5 m	20/Sept/19	water	n=1
Rn sampling 22	N 68°17'52.7" E19°7'12.0"	4.2 m	1.5 m	20/Sept/19	water	n=1
Rn sampling 23	N 68°17'53.2" E19°7'17.7"	6.1 m	1.5-4 m	20/Sept/19	water	n=2
Rn sampling 24	N 68°17'52.5" E19°7'16.6"	4.2 m	1.5 m	20/Sept/19	water	n=1
HTH core 1	N 68°17'53.2" E19°7'17.2"	7.6 m	15 cm	22/Mar/19	sediment	n=1
HTH core 2	N 68°17'52.9" E19°7'14.1"	6.8 m	33 cm	22/Aug/19	sediment	n=1



**Figure S1.** Daily average discharge in  $\text{L s}^{-1}$  of neighbouring river Miellejohka in years 2017 and 2018 (ANS, 2020b)