

S2 A summary of sampling dates of water in 2019 for the measurements of electrical conductivity, pH, dissolved oxygen in the surface-water (benthic) zone (a), nitrate in the surface-water zone (b), and nitrate in the hyporheic zone (c). Numbers in bracketed superscripts indicate replicated samples measured at each site; no superscripts indicate one sample. N denotes sample sizes.

(a)

Site	Habitat type	Dates	N
A1	Surface	9/7 ⁽³⁾ , 10/12 ⁽³⁾ , 10/24 ⁽³⁾	9
L1	Surface	9/7 ⁽³⁾ , 10/12, 10/25 ⁽³⁾	7
S1	Surface	9/7 ⁽³⁾ , 10/10 ⁽³⁾ , 10/26 ⁽³⁾	9
L7	Surface	9/8 ⁽³⁾ , 10/12 ⁽³⁾ , 11/8 ⁽³⁾	9

(b)

Site	Habitat type	Dates	N
A1	Surface	9/7, 10/12, 10/24	3
L1	Surface	9/7, 10/12, 10/25	3
S1	Surface	9/8, 10/10, 10/26	3
L7	Surface	9/7, 10/12, 10/26	3

(c)

Site	Habitat type	Treatment type	Dates	N
A1	Hyporheic	Control	9/7, 10/24	2
		Treatment	9/7, 10/24	2
L1	Hyporheic	Control	9/7, 10/25	2
		Treatment	Sample loss due to washout of the well	0
S1	Hyporheic	Control	9/8, 10/10, 10/26	3
		Treatment	9/8, 10/10, 10/26	3
L7	Hyporheic	Control	9/7, 10/26	2
		Treatment	9/7, 10/26	2